DOCUMENT RESUME

ED 217 840 IR 010 192

AUTHOR Johnson, Johanna H.
TITLE Signs and Guides: Wayfinding Alternatives for the EMS Library.
PUB DATE 81
NOTE 152p.; Master's Thesis, University of California at Los Angeles. Photographs may not reproduce well.

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS College Libraries; Data Collection; *Design Requirements; Higher Education; *Library Guides; *Library Instruction; Library Services; Library Surveys; Literature Reviews; *Orientation Materials; Questionnaires; Science Education; *Signs
IDENTIFIERS *Library Users

ABSTRACT

Concerned with increasing the accessibility of the collection of the Engineering/Math Sciences (EMS) Library at the University of California at Los Angeles through the use of self guidance systems, this practical study focused on the problem context, general library guides, and library signage in reviewing the literature, and conducted a survey of library users to identify orientation problems. Discussion of general library guides covers the advantages and disadvantages of such guides, costs, design and format, organization, contents, and distribution. Signage is discussed in terms of existing problems in locating materials, the overall plan of a sign system, signage hierarchy, communication, and typography and layout, and recommendations are included for a modifiable system. The development of the survey questionnaire and its administration are described in detail, and recommendations based on responses to the questionnaire are provided. Additional materials on the survey are provided in the first appendix, including copies of the pretest and the questionnaire, as well as raw data. The second appendix contains a library guide evaluation sheet, the old EMS guide, and a first, rough draft for a new EMS guide. Definitions, a 37-item bibliography, and 60 references are included. (RBF)

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Signs and Guides:
Wayfinding Alternatives for the EMS Library

Submitted in Partial Fulfillment of the
Requirements for the MLS Degree
Graduate School of Library and
Information Science
UCLA

by

Johanna H. Johnson

1981

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ABSTRACT

Navigating a library building is no minor feat. In fact, it is often such a frustrating experience that patrons are less than eager to repeat it. A well integrated self-guidance system of signs and other graphic materials could help alleviate these types of orientation problems. Such user aids can transform library use into a pleasant and productive activity.

This paper begins by researching the elements important to a sign system and a general library guide. It then covers the methodology of a survey designed to study orientation problems encountered by users of the Engineering/Math Sciences Library at UCLA during Winter Quarter 1981. It concludes with recommendations based on these findings which relate to signs and a general library handbook.

ACKNOWLEDGEMENTS

I wish to extend special appreciation to my advisor, Dr. G. Edward Evans and to Karen Andrews (Head of the EMS Library) for their help in pulling this project together. Thanks are due also to Alan Benenfeld (Head of the Physical Sciences and Technology Libraries), the staff of EMS and PSTL, my family (Mom, Dad, aunts, uncles, and grandparents), and my library school cohorts (I like the word "cohort." It means a group united in some struggle---nothing better describes library school). Their support and encouragement made completion of this paper a reality. I have Chris Warber to thank for the photographs which appear within. Finally, I want to express my gratitude to Mimi Dudley and Esther Grassian of the California Clearinghouse on Library Instruction for allowing me to utilize their collection of sample library guides.

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INTRODUCTION

Towards the end of last school year three things helped crystalize the direction this paper has gone in:

1. A friend who worked in the Engineering/Math Sciences (EMS) Library mentioned the need for a general guide.
2. This idea was reinforced and expanded shortly thereafter when my internship supervisor made a similar suggestion.
3. I have long had an interest (borderline obsession) in making libraries easier for the patron to use.

Finally, as if to "seal the deal," I stumbled across R.J.P. Carey's _Library Guiding_ and Dorothy Pollet's article in the _Wilson Library Bulletin_, "You Can Get There From Here." _I_ didn't choose this paper, _it_ chose me.

The usefulness of a study such as this is limited primarily to the universe it is designed to serve---the EMS Library. However other libraries may find the recommendations of some value as well. If nothing else, like M.I.T.'s pathfinder guides, the bibliography and methodology should provide a starting point for others to begin a similar study.

General Problem Context

In order to really understand the feeling experienced by many library users, you have to start at a very basic level. At this point we begin with a place and a need---the place is a library and the need, a desire to orient oneself in new surroundings. Within this context, visualize the library as a wall (uniformly mass produced brick) built to retain society's information resources. There are doors in this wall (also without any special distinction) but you must already know where these doors lead or expend a lot of time and energy searching for the door you want. You may end up settling for any door, or maybe just be unaware there's something better suited to your needs a few doors down. While perseverance will ultimately pay off, a large number of people will give up early in the battle.

This brings us to an interesting consideration. Why should it be a battle at all? What if---instead of playing this guessing game---we are provided with maps? Not only is the position of each door graphically represented on these maps, each door now has a sign over it. Our search time has been cut in half and our potential for success has been greatly increased. Libraries need not be the enigma they are to so many users. The sense of bewilderment that can face even the most sophisticated library user in unfamiliar territory can be greatly reduced by an adequate self-guidance system.

Methodology

Definitions

GENERAL LIBRARY GUIDE: a booklet which provides the library user with a quick overview of a library's collection, its services, and its policies.

ORIENTATION AIDS: materials such as signs and guidebooks developed primarily to help patrons familiarize themselves with a particular library environment.

PATHFINDERS: printed guides which provide specific search strategies for a specific topic.

POINT-OF-USE INSTRUCTION: "instructional media located with or adjacent to a research tool explaining its efficient use [which] may be print or non-print format or a combination of the two."[1]

SELF-GUIDANCE SYSTEMS: a combination of aids (like signs, handouts, guidebooks, reference instruction tools) which are furnished to help a patron find their way around a library by themselves.

SIGNAGE: a system of graphics "designed to guide people in understanding the physical layout and [in] utilizing the services of a facility such as a library."[2]

Data Gathering Technique

The main thrust of this study was practical rather than theoretical. We were concerned about how to increase accessibility to the EMS collection through the use of self-guidance systems. The library survey technique was used to gather data. Maurice Tauber has described this as a method which includes all the major techniques of research like "documentary and statistical analysis, questionnaires, check lists, interview, observation, and the compilation of specialized data for particular conditions." [3] My feelings that any single method would be insufficient to give us a well balanced picture were confirmed by Pollet and Haskell's Sign Systems for Libraries. The book states that a multimethod approach contributes to a more reliable understanding of what goes on in a public-access setting.[4]

The library survey technique is used to study conditions and services within the library in order to improve their quality. This method seemed well suited to our needs. First steps included a literature search, development of a user survey, observation of orientation problems noticed while interning on the EMS reference desk, as well as informal interviewing of patrons and staff.

Literature Review

The search began with sources like Library Literature, the card catalog, specialized bibliographies on the broader subject area of "library orientation", and a hunt for representative samples of general guides suitable for the EMS Library. EMS had an old general guide (see Appendix A) from 1974/75 which is no longer in use. A cursory examination showed some of the information needed updating, format and layout could use improvement, a floor plan of the library was lacking, services offered by EMS weren't covered in great enough detail, and the Calendar section (quickly outdated) was better suited to a handout sheet.

The purpose of the literature search was to gain a greater understanding of the subject area, to formulate a list of characteristics essential to good signs and guides, and to provide examples of what other (especially Science and Technology) libraries have considered important to a general guide.

I. GENERAL LIBRARY GUIDES

The qualities of a good library guide are much the same as that old song which goes, "Lovely to look at, heaven to hold." The primary goal of a handbook is to be picked up and used. In order to achieve this, its cover must attract and its overall size must not repel ("Like the preacher...it is better to err on the side of brevity"[5]). Internal organization should take into account those items of greatest importance to the reader and those most apt to need revision. Like the ready reference tool it is, pieces of information contained within should be easily accessible as demanded. Finally, since the guide is in essence an invitation to make fuller use of the library's resources, its tone should invoke an aura of welcome.

Start Here: Do Not Pass Go

I think it's best to begin a study like this one by exploring the purpose(s) of a general guide. At first glance, there appears to be as many definitions as there are libraries. Upon closer inspection one finds that though content may vary, the function of a general guide does not. What is that function? Exactly what its name implies---a general overview of the whole library. It introduces. When patrons have difficulty using a library effectively the guide acts as "a starting point for the student in his search for information,...[and] as a refresher course for those who are familiar with libraries"[6]

Mona McCormick describes a general guide as "a book that is small enough to be held in the hand that treats broad subjects in a brief fashion."[7] In the context of a guidance system, a handbook is the source that pulls it all together for the reader in one place. It ought to answer such questions as "What do you have?" and "How can I find it?" R.J.P. Carey feels a guide should contain three basic elements:

> first, to make readers aware of the organization of the library...; secondly, to inform them of the books and services the library has to offer; and, lastly, to set out the conditions of library use...[8]

General library guides have also been touted as a means of saving staff time answering repetitive questions. Perhaps. It's still easier to ask someone than it is to read and dig out the information for oneself. Maybe it's more exact to say, availability of a guide will increase a patron's sense of control over the library environment in those many instances when there is no one to ask. From a personal standpoint, I often prefer the do-it-yourself approach (finding verbal instructions too vague or---heaven forbid!---begrudgingly given).

Peter Fox contends that a general guide should do more than just impart basic information. It could also serve as a means of encouraging "the reader to regard the library as a welcoming institution"[9] We do need to revamp the image. In a word association game "welcome" would rarely be paired with "library"---by the patron, at least. What better place to emphasize this aspect than with one of the first things a user may see?

Handbook Vs. the Rest of the Guidance System

"A 30- or 40-page handbook that attempts to answer every question which might be asked is probably never read."[10] The forty page library guide is often just another manifestation of that time-honored and oversimplified idea of what constitutes a guidance system. In general it demonstrates a lack of awareness of the alternatives or any concept of the system as a coordinated whole. It indicates to me that no one has taken the time to match needs to appropriate formats. The handbook cannot---and should not---try to do it all. Deciding which formats to use can be based on two criteria: the depth of information required and budgetary limitations.

Think of information requirements in terms of a pyramid. Meeting an immediate level of need, signs form the base of our guidance system. They utilize symbols to direct or inform, but do very little explaining. Handbooks are the next level---still a quick overview of the library but providing a little more detail than a sign. Lastly, we reach the more narrowly taylored levels: information sheets (subject bibliographies, etc.), class presentations (matching a general topic area to available resources), point-of-use instruction (detailed instructions for the use of a particular tool---eg: Engineering

Index---within close proximity of that tool), Pathfinders (establishing the initial steps of a search, citing particular tools for a narrow topic).

Saving $$

After the degree of specificity has been determined, financial considerations come into play. Since signs and guidebooks are more expensive to produce, they should contain more "permanent" types of information. They should also involve the greatest amount of planning beforehand. The other formats discussed previously are easier to produce and thus are better suited to material which requires frequent changes. Almost without exception, matching format to basic needs is the most cost-efficient method of devising a guidance system.

There are many ways you can reduce the cost of a general handbook without undermining its effectiveness. You could design it as part of a series of information sheets (the first sheet being a general overview of the library). The Management Library and the Education/Psychology Library here at UCLA have used this technique. Each set of information sheets is a different color. Color works as an attention getting device as well as a visual indication of subject matter.

This could turn out to be false economy. The information sheet/general guide is less apt to be saved and stored for future use. It is quite possible that the cost of producing a general guide that is retained is equal to producing a general information sheet which is discarded upon each use.

> a handbook which looks cheap may in fact turn out to be more expensive if it encourages the user to read the particular section which interests him at the moment and then consign the copy to the waste paper basket only to pick up another copy on his next visit to the library.[11]

Photographs should be used sparingly if price is a major consideration. They tend to increase cost and can make the handbook appear dated more quickly. Drawings or illustrations, on the other hand, are endowed with a more timeless quality. If you are not fortunate enough to have someone on your staff with artistic skills, you might find an art student (or some local talent) willing to contribute their expertise for the project (it could represent a worthwhile addition to their portfolio. Used with discretion, as accent pieces, illustrations do add appeal and interest.

Another area in handbook design that can help reduce costs is organization. For instance, it's a good idea to place items which are most apt to need revision (eg: phone numbers, library hours, borrowing periods) on the inside cover front and back so that the cover is the only thing that needs replacing when changes occur. Some of the better guides I've examined did just this.

M.I.T.'s James Madison Barker Engineering Library used the outside back cover for a cross section (a slice including all floors) of the library's physical layout, a list of department phone numbers, and the regular library hours. The front inside cover had an extremely useful feature: a "Library Directory" listing the item (eg: theses) and its location (eg: 8th floor). The inside back cover had a list of suggestions for what to do when "an item you want isn't where it's supposed to be." Although information such as this is less likely to need revision, its position allows it to be easily accessed again and again (this type of information might be worth repeating as a sign as well). UCLA's Biomedical Library used their inside cover for staff names and phone numbers and their inside back cover for an overdue fine schedule with replacement policy.

Another place I see as providential (perhaps even better than the cover because ideally the cover is the most expensive part of the booklet) for material which requires regular updating is the inside sheet (which makes up the first and last pages) of your guide. It's an excellent position for such things as staff telephone numbers or library hours.

One method of economizing that I would strongly advise against is the use of cheap (ie: poor quality) paper. Not only does it degrade the overall effectiveness of the handbook (making the text more difficult to read), it increases the discardability of the guide. One handbook I reviewed was produced on low grade newsprint in booklet form (now if it had been presented in a newspaper format, that might have been worth imitating). It was an excellent example of what poor quality paper does to a guide.

Surveying What's Been Done Before

There are many controling factors influencing the final shape of a guide. Available funding is one thing. Looking at sample guides before making the final decision is another. "A librarian can...develop his awareness by examing publications he particularly admires with respect to such matters as choice of paper, type, placement, size, and illustrations."[12]

I was fortunate enough to have the California Clearinghouse on Library Instruction's collection of handbooks and Karen Andrews' collection of library guides---both of which I found extremely useful. Others doing a similar search might also wish to consult ALA Headquarter's listing of handbooks available on interlibrary loan or the LOEX Clearinghouse at Eastern Michigan University. In Appendix B you will find an example of the Library Guide Evaluation Sheet (a check list) I used while taking notes on sample guides. It speeded the examination process considerably.

Design and Format: the Art of Communication

Typography is the art of communicating the written word on a printed page. It should reveal rather than obscure ideas---helping "people to communicate with the clarity which an idea deserves."[13] It also serves as a nonverbal indication of the importance of the idea being transmitted. For that reason, I find it especially disheartening that so many of our library publications are typified by what Peter Durey refers to as stodgy typography. "For a profession supposedly interested in typography and book design the standards are often deplorably low..."[14] Perhaps no other phase of handbook design receives less attention. Why make the investment a general guide implies only to fall short here? It just doesn't make good sense.

Handbooks are often responsible for the first impression a patron forms of the library. "poorly produced library publications will not only fail to make any impact but will also help to reinforce a poor image of the library."[15] We are dealing with a very media-oriented public.

> He is constantly bombarded with commercials, advertisements, and products of all sorts which all pay great attention to presentation..., the library handbook should be...suitably packaged in order to achieve its purpose of being read.[16]

In other words, in terms of use design can be vital.

The first contact point between a library user and a general guide is the guide's cover. "The cover for the handbook should be prepared with extreme care, as this is probably the most important and expensive part of the entire booklet... [it] should not be the work of an amateur."[17] Cover design can either act as a lure (which books are your eyes naturally drawn to when you are glancing over a book display?) or a deterrent. Also, once a good cover design has been developed it could be used over and over again with each revision---becoming a logo-like representation of your library.

UCLA's general library guide (a handbook which briefly covers all the libraries on campus) does something like this, simply changing the background color of the cover each time it's redone. I could visualize the EMS Library doing some interesting things with an astronomy or space science motif. Or, perhaps, something out of technology's past like a picturesque old bridge. Using natural phenomena (a solar flare; a galaxy shot) or images drawn from history will give the cover that ageless quality which we find so desirable. The possibilities are endless and intriguing.

Free photos or nearly free photos for the guide's cover are worth looking into. Many times these can be obtained from anyone who stands to benefit if the photographs are published. "Usually this is a publicity officer or travel agent."[18] John Tiner acquired photographs of penicillin mold from Lederle Laboratories and shots of the lunar lander on the moon from NASA. A list of the photo credits on the back of professional society brochures like the one put out by the career guidance section of American Society of Metals[19] tells a similar story. And for those nearly free photos:

> Most major museums carry files of historical photographs. The fee for using these photographs is only the cost of the print, say $2.00...Yerkes Observatory will send a catalog of photographic prints...they sell for reproduction. Many newspapers supply photographs for a small fee.[20]

Next we move to the inside of the guide where layout of the page becomes an important consideration. This involves choosing type faces, type size and spacing, arranging text, illustrations, and headings on a page in such a way as to increase "both the attractiveness of a page and its ability to communicate at a glance. Related passages of text should be grouped together...White space should be used in a sensitive fashion to indicate a change of subject. Margins sould be ample."[21] Layout design must take into account pages which will lay side by side (the open pages of the guide should complement each other). For instance, "to place photographs at the bottom of two opposite pages results in a layout which is too heavy at the bottom."[22]

It must also be geared toward a publication which is generally consulted for pieces of information as needed---rather than being read altogether at one stretch. Conventions like running headings along the top of each page are one way to help the reader find his place with ease. In contrast, graphic overload should be avoided at all costs. This occurs when so much text has been crowded on one page that it no longer can be scanned easily. It also happens when there are too many pictures or other types of "attention spots" on a page.

For decisions like choosing paper, type faces, and color combinations of paper and ink, it's always best to consult with your printer. Just be sure the type chosen is a size that's comfortable for most people to read and (while it's fun to experiment with different colors of paper and ink) the most legible combination is still black print on a light background.

The number of pages in your handbook will generally be restricted to multiples of 4 (4, 8, 16, 32 pages) simply because of the way a book is constructed. "If you find you have extra space, do not pad the text. Such space can be used for lists, charts, illustrations, or more effective placement of text."[23] Originally the recommended size for a handbook was 8x11 (fitting easily into a loose leaf binder). Now general consensus seems to be that students prefer a smaller format---portability being a plus for retention.

Organization

There are basically two different ways of arranging the contents of a guide. The more common is to group related items and place information which must be constantly referred to at the beginning or the very end ("the bulk of descriptive information should be arranged in order of decreasing importance to the user "[24]). The second way is to organize the material alphabetically (which is somewhat dependent on people being able to figure out what you've decided to call something. "N" for nonprint media or "A" for audiovisual?). Peter Durey felt the alphabetical approach to be superior for easy access to specific pieces of information. I can see the merits of both styles. I like the logic of the first system and yet the ease of access in the second.

Subject headings (a good locational device) should be set in bold type so they stand out from the body of the text.

Also, it's advisable to select headings which are meaningful to the reader. Avoid technical jargon ("circulation procedures") or vague headings ("miscellaneous information"). Of those guides I examined, the Biomedical Library guide and the Barker Engineering Library guide compared well here. They made use of very clear subject headings ("borrowing privileges" and "borrowing materials").

A table of contents and/or index will help the reader locate pieces of information quickly. Mary Miller suggested that a table of contents be included in every handbook of fifteen pages or more. I feel a brief table of contents would be useful in almost any handbook (providing a quick outline of the information contained there). It becomes an especially critical finding device when an index is not included. Charles Buckley summed up the decision about whether to incorporate one or both in this way, "To facilitate use of a large, complex library system, a handbook must contain subject headings, a table of contents, and an index. For smaller, less complex libraries, handbooks with fewer guides are functional."[25]

Contents

The fundamental reason why a handbook is produced lies within its covers. Once we have designed something the patron will pick up, the guidebook should have all the basic information he needs to know about the library. A good synopsis of what is often included in a general guide can be found in the Federal Library Committee's _Guidelines for Library Handbooks_. I will cover a few of these areas briefly in this report.

Borrowing Privileges

An important thing for anyone using a library to know is what can be checked out, for how long, and by whom. This should be approached not from a punitive standpoint (ie: you can only use these under certain circumstances) but from the more positive, 'We have these materials available for your use under these conditions.' "Rules in a library...are necessary. When they assume dominance...they reflect a library in which materials and facilities take precedence over people."[26]

Mary Miller suggested presenting circulation periods and fines as a chart instead of embedding the information in text. UCLA libraries have been putting out information sheets in a chart format, "Summary of Library Privileges", for several years now. Students find them very easy to refer to and I believe it is equally well suited to a guide. I especially like UCLA's terminology for things which must be used in the library. They use the description "library use" instead of the more negative "no circulation" which appears so commonly.

Phone Numbers for Library Staff

This section can either be a listing of departments with phone numbers or---if revision is done fairly regularly---

a listing of department heads with their numbers. I've seen it done both ways. Using staff names seems a little more personalized.

Description of Holdings and the Audiance Served

Valuable information for any new (or not so new) user of the library is the extent and type of coverage one may reasonably expect to find there.

Services

Services can include anything from interlibrary loan, library instruction programs, display of new books, photocopying (self-service or document delivery), fiche copying, or computerized searches. Whatever the library offers as a service can at least be mentioned in the general guide. This is an excellent opportunity to spell out exactly what is available and how it can be used.

Access to the Collection

The card catalog (or its equivalent) and classification scheme ought to be discussed in a general guide---although information sheets are probably the best place to go into detail about the use of either one. A chart showing the major breakdowns of the classification system is a good idea and it's probably desirable to give a definition of any location symbols used (eg: the asterisk for oversize books, etc.).

Major indexes should also be mentioned---especially in a facility like the EMS Library where most technical reports can only be accessed through this source. In addition, another method of gaining entré to the collection which needs mentioning is staff assistance.

Floor Plans

While some consider floor plans useful but not one of the "essentials" in a general library guide, I find them very important. Peter Durey recommended that a good position for the floor plan was at the center opening of the guide---possibly printed on a different color paper from the rest of the text. Cosette Kies felt the floor plan should be as simple as could practically be achieved (showing the location of items of major interest to the user rather than the architect). Placing labels directly on the floor plan itself seemed to be preferred over using a numbered key.

Floor plans are an ideal way of clearing up confusion over what is meant by the south reading room or the west wing. It visually directs the user. "This writer for one has a problem figuring out which is the west wing and which is the east wing and prefers seeing the plan and following her right or left."[27] This writer also prefers a map.

Use of a Date

Date of publication ought probably to be indicated on the guide in some way. An internal coding seems the best bet.

Some libraries, the Biomedical Library for one, put the date of the school year on the front cover. This is only a good idea if you plan to revise every year.

Special Features Worth Imitating

Examples of features which would add to the usefulness of a guide are those like the "Library Directory" and "What to do when you give up hope" included in the Barker Engineering Library guide.

Distribution

The last topic we will discuss is distributing the guide once it has been designed and printed. Under which contexts will it be most meaningful? First, the guide should be available on a general basis at an information kiosk or various spots throughout the library for easy consultation as occasion warrants. It could also be distributed during library tours and class presentations. If it is actually handed out during a tour or lecture, it would be important to draw attention to those things potential users would be most interested in knowing (special services, phone numbers, what to do when they have a problem using the library, etc.) Some sort of a distribution plan should be prepared in advance for students, faculty, and other users.

II. LIBRARY SIGNAGE

There was a time when orientation needs could be met by marking trees, leaving piles of rocks along a trail, or drawing a map in the ground with a stick. For urban man (and for library patron) those days are long gone. And yet, library guiding systems have not progressed far beyond that point. Our signage (rarely conceived in terms of the whole) is most often a hodgepodge affair, a random gesture. We do it by bits and pieces. Too many, or too few, or too understated to do much good. Understatement, in fact, (due to the library's traditional concern with decorum) is probably one of our major weaknesses. "There is such a thing as being too restrained... so polite and inconspicuous that they [are] for the most part ignored."[28] Some libraries feel "signing should be 'discreet,' even to the extent of forcing users to find their way by trial and error..."[29]

As an occupation which prides itself on being a helping profession, librarianship should be especially concerned with development of the most effective self-guidance systems possible. In a day of vanishing resources, tight funding, and overworked staff you'd think it would be one of our top priorities. Too often it's not a priority at all. So we continue to waste valuable staff time and frustrate library users by not providing wayfinding alternatives.

But Where Are the Books?

"The architecture of modern libraries tends to be anonymous...And once you've found the library, it doesn't explain itself adequately..."[30] The necessity for signage was first brought home to me when I overheard a perplexed student asking, "But where are the books?" He wasn't standing more than two feet from the stack entrance at the time. The stacks sign, small and flat against the wall, was not visually apparent on entering the library.

The physical arrangement of EMS often poses a challenge to its users. First, the building was not designed to be a library. Functional areas have had to conform to pre-existing space. Second, the stacks are divided into three sets (runs) of call numbers: books, oversize materials, and periodicals. Often people come away empty handed because they don't realize that. As one patron put it, I was "confused as to where to find books as opposed to the periodicals or reports in book form...I was looking for books, thought they were all checked out til I figured out there is a book section too."[31] Third, there are quite a few special locations where materials are shelved. For instance, the general collection of current periodicals is kept one place, displayed Engineering periodicals are kept another, and Mathematics, selected Meteorology and Astronomy periodicals are still another place. Some of these problems will be eased in the next couple of years (the organization of the stacks is to be changed) but in the meantime a strong signage system is especially important to help users find their way around EMS.

A Plan

A friend of mine suggested I title this paper "Telling Them Where To Go." We got a nice laugh out of all the variations on that theme (for example, since only one elevator goes up to the Engineering Library: "Telling Them Where To Get Off", etc. According to the survey results, however, telling them where to get on would have been more appropriate). In all seriousness, a sign system should tell them where to go. It should tell them as soon as they are ready to use the information---not before they've passed through the entrance or after they've made a wrong turn.

A good signage system starts with an overall plan. The plan takes into account factors like types of users (ie: academic level, degree and kinds of library use, proportion of foreign students or other special groups, etc.), physical layout of the library, decision points (at which point will a patron need to decide whether to go left, right, or straight ahead? How far away will they need to know?). The plan establishes a consistent form of lettering, terminology, format, material, size, and use of color.

We are devising "a readily recognizable communication system rather than a jumble of visual distractions."[32] This means that any existing signs must also be evaluated in regard to how well they fit into the new plan. "Evaluation can make one sensitive to the general tendency to label rather than to guide."[33] John Lubans suggests we take time to survey users and observe the flow (and misflow) of traffic in our libraries through the use of tools like "bump charts" (a bump chart pinpoints areas where users must stop to ask for directions or are most apt to take a wrong turn). Spencer and Reynolds also concur. "Any signing system should be preceded by a careful study of users' movements within the building to determine the patterns of flow between the various possible destinations."[34] Sign makers must be able to predict how people will respond to their signs. Will they interpret that arrow correctly? Do they know what "reference" means? How would color blindness or poor English language skills affect interpretation?

Primary user groups for the EMS Library consist of patrons with an interest in Chemical, Nuclear, Thermal, Electrical, and Mechanical Engineering, Materials Science, System Science, Computer Science, Mathematics, Astronomy, and Atmospheric Science. There is a high percentage of users for whom English is a second language. Many users come in looking for specific items: a technical report, a handbook, a conference proceeding, a photocopy machine, a quiet place to study. Barbara Marks' statement seemed especially relevant for our library, "few people have the time---or are willing to take time---to read more than a few words. Most signs should be capable of being absorbed in passing."[35] Or, as one survey comment put it, "Signs now used require study. I'm one to just charge ahead...rather than invest time in analyzing signs."[36]

Other planning considerations should include things like type and intensity of light signs are to be seen under. Natural lighting? Florescent lighting? Spot light? Signs observed in the stacks area where lighting is often of lower intensity would have different requirements than those in a fairly well lighted main reading room. Even the visibility of different color combinations will vary according to the degree of light present. A planner will also have to study the angles and distances from which a sign is most apt to be viewed.

The Hierarchical Road Map

The signage hierarchy can be thought of in two ways. First from the standpoint of how much, how soon (eg: a sign to identify the stacks area, then a sign explaining different stack levels, and finally shelf labeling). Second, as a hierarchy of emphasis.

As a general rule of thumb, information should become increasingly specific as the user progresses toward their destination. This reaps a twofold benefit; the total number of signs is reduced and a person only receives information as they require it.

> At each decision point the user needs sufficient information to enable him to make a choice at that point, and no more...Experience

> has shown that the more signs there are and the more information they carry, the less people read them.[37]

The first decision point is reached after a patron has crossed the library's threshold. A directory located at the entrance (often in tandem with a floor plan) provides an introduction to the layout of the building. An effort should be made to simplify and reduce the number of entries listed on this sign.

Another way of helping a user to orient themselves to the library is by emphasizing major service areas (grocery stores have been doing it for years). Emphasis can be achieved through position, size, and/or color. Suspended signs facing the heaviest traffic flow generally attract the greatest amount of attention.

Color can serve to clarify the organization of a building through the use of color coding or hue intensity. With color coding, floors or service areas are identified by different colors. When color is used as a locational symbol several things must be kept in mind:

1. Color should be used consistently to represent an area, even down to each related sign which leads to that place.
2. Choose colors with short, familiar names and distinct variations.
3. Limit color coding to no more than 5 to 8 different areas. "Studies suggest that people can distinguish and remember a relatively small number of categories by color; between 5 and 8 reliably..."[38]

4. Color should be used to reinforce a written message, not relied on to convey the message itself. Approximately 8% of men and .45% of women suffer from some form of color blindness.[39] Also, light levels tend to vary at different locations within the same library building. "Color...is totally dependent on light. As the light changes, some people see certain colors better than others."[40]

color intensity is also used to help identify areas. In this sense, the strongest shades are reserved for major areas. Less emphatic shades are used for other signs which support the system. This way the important information catches the patron's eye first (eg: where do I go from here?) and isn't forced to compete with information which will only become important as they reach their destination.

Communicating With Signs

If typography is the art of communication, words are the meat and potatoes of communicating. Words convey tone, confuse or enlighten, attract attention or cause people to tune out. They even have different meanings depending on the context in which they're found. There are endless examples of signs imbued with more meaning than their creators intended: from the almost classic, "SEX: (see librarian)" or "SEX: (for sex ask at desk)" to the one (found in Hayden Planetarium) that promises a delightfully out of the ordinary trip to the bathroom, "To Solar System and Rest Rooms."[41]

Words can confuse in other ways as well. They can lack sufficient specificity. We have a set of plastic overlays for catalog cards at EMS which direct the patron to "Ask at desk." It's never clear to the user whether that means the Reference Desk or the Circulation Desk. Very frequently they approach the wrong one and must be redirected. Terms which users perceive as similar (like reference and reserve) are often misunderstood and should therefore be used carefully. And finally, everyday terms used in a special manner should be avoided (for instance, "main entry." Is it a front door or something else again?).

Keep terminology simple and uniform. "Once a decision on a term is made, that term should be used consistently. Librarians tend to use words interchangeably...serials, periodicals, magazines, or journals."[42] There's that word again. Consistency---the dominant characteristic of any strong signage system.

In general, where signs are concerned, short is better than long. The fewer words you use to convey a message the more likely it is to be read. Unlike other styles of writing, sentences do not have to be complete. Some words can be implied. Take the iniquitous, ever-present STOP sign. It adequately communicates the message (STOP = You stop here and then proceed when safe). The very brevity of its announcement grabs attention.

Another example of words used as an attention getting device would be a small sign above the stacks directory which reads SAVE TIME. I saw a picture of a sign somewhat like that in Carey's book[43] and although it was small and blurry, it managed to catch my eye. Time is something we all want to save. People should think of a stack directory as a time saver rather than just more verbiage to wade through. Perhaps a few such well placed words would help educate the public to those instances when it's worth their time to take a minute to "analyze" a sign.

Now back to the STOP sign (which is more than just the ultimate in brevity). It is an excellent example of the usefulness of symbols. The red, octagonal shape has become synonymous with its warning to stop. "Symbols are good at indicating certain types of messages...the best solution is to use symbols and words simultaneously."[44] If words are to be used with symbols, they should be positioned below or to the right of symbols. Where possible "any sign with arrows should be placed at the point where the change of direction occurs... Studies show that arrows should be placed to the left of other symbols [including words]"[45] For libraries like EMS with a large number of foreign users, symbols are especially advantageous. Symbols for telephone, No Smoking, No Food or Drink, and arrows are almost universally understood.

Typography and Layout

Typography and layout will vary according to a sign's function and the library setting in which it is to be viewed.

For that reason and because there are so many good books already available on the subject (see bibliography for a sample), I won't go into great detail. However, here are a few common rules gleaned from my research:

1. Consistency is important. Choose one lettering style to be used throughout. Keep spacing between letters and words the same, regardless of whether the message is long or short.
2. Lettering should be clean and clear, preferably san-serif (Helvetica Medium and similar styles are often chosen for their greater legibility).
3. Evidence has shown that a combination of upper- and lowercase letters is easiest to comprehend ("Any message with more than three words probably should not be written in uppercase alone."[46]).
4. Character size should be based on the shortest distance from which a sign must be read in order to allow a patron sufficient time to respond. Wechsler suggests that the lettering be 2 to 3 times larger than the minimum required for people with normal vision.[47] The International Standards Organization has made recommendations for computing character size, as has Spencer[48] and Cohen[49].
5. "It is generally desirable to have a greater margin at the base of each panel than at the head. The appearance is visually more satisfactory if the wording is positioned slightly higher than centre."[50]

A Modifiable System

There is one final area I'd like to cover while we're on the subject of signs and that's planning a modifiable system. Before investing in a permanent sign system, it's important to experiment. Explore different possibilities for wording, placement, and modular combinations. Begin with less expensive materials. Although you may want to end up with silk-screened lettering on dark Plexiglas, start with matboard. Matboard signs slid between two pieces of Plexiglas make revision easier while still giving a feeling of permanence to the signs (and hopefully discouraging the "mustache artists" somewhat).

The longevity of a sign system is directly proportional to the amount of built-in flexibility designed into it. Whatever you end up with, keep the long term system in mind. A library is a constantly shifting organism---the one sure thing is change. Plan for it.

III. THE SURVEY

A major factor in designing any survey is deciding what that survey is intended to do. The motivating force behind this survey is perhaps best summarized in Pollet and Haskell's introduction to Sign Systems For Libraries. They state, "by studying user reactions to the visual environment of libraries, librarians can do a number of things to make that environment more understandable..."[51] In other words, you must study user reactions to the environment before you can hope to make meaningful changes in those surroundings. The purpose of this questionnaire, then, was to provide a channel for user input in two areas. First, to get an indication of the difficulties users experienced orienting themselves to the Engineering Library. Second, as a measure of their awareness of the variety of services offered by EMS.

One (not entirely unexpected) by-product of the survey has been an increased interest in services ("If any of the services listed in set II are available and are uncircled---I would like a sign to inform me."[52]). Even more important, I believe patrons interpreted the survey as an indication of the library's concern for their plight.

A primary consideration of this study was to help identify problem areas which fell within the scope of a general guide or sign system. Even though we turned up all sorts of interesting peripheral information---potentially useful to the library for other purposes---there will be no attempt made within this study to deal with that material. As for the decision to administer the survey during Winter Quarter: time, energy, and financial constraints required that the survey be limited to one quarter out of the academic year. Winter Quarter was selected as a midpoint representative of the year. "Methodology should be dictated by what is economically feasible and what will effectively gather the desired data."[53] The survey has indeed been indicative of the types of problems users are finding most frustrating. This survey points the way, it was not intended to do more.

The process of modifying the questionnaire began almost as soon as the first rough draft was completed. In a breakfast conversation one morning, a System Science graduate student (who uses EMS occasionally) maintained he never studied there because of the noise. Not long thereafter I changed one of the survey answers from "a quiet place to study" to simply "a place to study." To have users decide against choosing an answer merely because of an adjective would have constituted a serious flaw. Questionnaire results have shown two things: a large percentage of users do study in the library and noise is considered a critical problem.

Designing the survey incorporated comments and suggestions from a wealth of sources (fellow library school students, my advisor, the staff at EMS, and of course pretesting).

Examples of the kinds of things I have others to thank for are as follows:

In the section intended to test user awareness of services offered by EMS, my Research Methodology classmates suggested I change the format from "A) Yes B) No" for each question to a much simpler list with the instructions to circle only those numbers which apply (see the next two pages for a sample). The end result is much less formidable to the survey participant than it might have been.

My advisor, Dr. Evans, came up with the method of selecting random times to conduct the survey using a table of uniquely numbered library hours (more on this later). He also made useful suggestions in regard to additional questions which needed space for "If yes, please specify." Simply a yes or no answer would not have provided any insight into the specific kinds of problems users were having or ideas on how to solve them. The open-ended answers have allowed the survey to do more than just verify the few problems we already knew existed. Also, even though this was a problem oriented survey, we received some favorable comments as well (eg: "This is a very well run library..."[54] "This library is much easier to be productive in than others at UCLA."[55] "The staff in this library are exceptionally helpful and good natured."[56]).

Karen Andrews (Head of EMS) helped me refine the tool still further. We arranged Section I. to make it faster for users to identify themselves in a general way using labels

4) Has computerized reference search services available.

A) No B) Yes

5) Allows mail renewals of library materials.

A) No B) Yes

6) Allows telephone renewals of library materials.

A) No B) Yes

7) Allows telephoning to see if a book is available at this library.

A) No B) Yes

8) Has at least one photocopying machine.

A) No B) Yes

9) Has a typewriter available for public use.

A) No B) Yes

10) Is a depository of publications from the National Aeronautics and Space Administration (NASA), National Technical Information Service (NTIS), and the Department of Energy.

A) No B) Yes

11) Has brochures available listing the hours and loan policies of other libraries on campus.

A) No B) Yes

12) The Technical Reports room has a librarian to assist you during the day Monday through Friday.

A) No B) Yes

13) The technical reports collection is not listed in the main card catalog.

A) No B) Yes

14) You can use the reference books in the area behind the Reference Desk on your own.

A) No B) Yes

15) You may place a "hold" (the book will be saved for you) on a book that has been checked out by someone else.

A) No B) Yes

Note: The following section is not meant to be a test of your competence but is intended instead to measure awareness of the services offered by this library.

SECTION II.

The Engineering Library offers which of the following services?
(Circle only those numbers which apply)

1) A reference librarian to assist you during the day Monday through Friday at the Reference Desk.

2) A technical reports assistant to help you during the day Monday through Friday in the Technical Reports Room.

3) Telephone reference service.

4) Computerized reference search services.

5) Mail renewals of library materials if material is not overdue.

6) Telephone renewals of library materials if material is not overdue.

7) Telephone queries regarding the availability of materials at this library.

8) Photocopy machines.

9) Typewriter available for public use.

10) Brochures listing the hours and loan policies of other libraries on campus.

11) Allows placement of a "hold" (the book will be saved for you) on a book that has been checked out by someone else.

12) A search for any of this library's books which you can't locate.

13) InterLibrary Loan to obtain materials not available at UCLA.

14) Duplication of microfiche upon request so that you may have your own copy.

15) Open access to the reference books located in the area behind the Reference Desk (you may use them on your own).

16) Microform (eg: microfiche, microfilm, etc.) readers and printers for paper copies.

17) Orientation tours at the beginning of each quarter or on request.

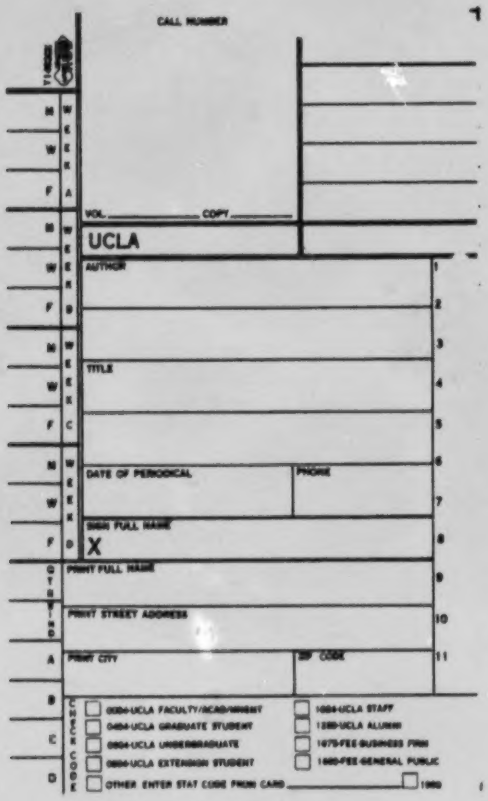
18) A change machine for dollar bills.

19) Displays new books.

20) Accepts suggestions for purchases.

21) Has some of its collection in storage.

they were already familiar with from the circulation checkout cards. We wrote and rewrote the introduction and changed the overall order of the survey so that the part on services became Section II. and the more open-ended portion related to signs and locational problems became Section III. (we hoped the change might give users something more with which to approach the open replies).



CALL NUMBER

VOL. ________ COPY ________

UCLA

AUTHOR

TITLE

DATE OF PERIODICAL

PHONE

SIGN FULL NAME
X

PRINT FULL NAME

PRINT STREET ADDRESS

PRINT CITY

ZIP CODE

CHECK CODE

☐ 0304-UCLA FACULTY/ACAD/[illegible]
☐ 0404-UCLA GRADUATE STUDENT
☐ 0804-UCLA UNDERGRADUATE
☐ 0806-UCLA EXTENSION STUDENT
☐ OTHER ENTER STAT CODE FROM CARD ________
☐ 1004-UCLA STAFF
☐ 1280-UCLA ALUMNI
☐ 1075-FEE BUSINESS FIRM
☐ 1460-FEE GENERAL PUBLIC
☐ 1900

Both Alan Benenfeld (Head of Physical Sciences and Technology Libraries) and Karen Andrews helped add to the list of services offered by EMS (Section II.) and the reasons why people might use the library (Section III.). This is probably a good place to note that all the services listed were available at the time of the survey with the exception of numbers 9, 18, and 19 (the new book display was added afterward). These three were included to alert us to survey participants who decided to go through and indiscriminately circle all the possibilities. People occasionally chose one of these by mistake but only once did anyone just circle them all. Alan Benenfeld also recommended some of the finer points like reassuring participants the anonymity of their responses would be protected and the special note above Section II. explaining its purpose (ie: to measure awareness, not to test competence). I could go on and on, but this should suffice to represent the amount of community effort that went into the production of this survey.

The questionnaire was pretested approximately one week before it was scheduled to start. Twenty-four surveys were distributed at 1:00 in the afternoon and ten were returned. There didn't appear to be any real problems interpreting the questions or the instructions and so, with only a few minor changes, we decided to go ahead with it as it was.

Random Selection of Hours

Selection of survey hours was accomplished by drawing up three tables of the hours EMS was open during the week and assigning each hour a unique number. The first table represented regular hours for the Winter Quarter. The second, hours for the week with a holiday (President's Day). A third, for the extended hours put into effect for final exams (see Appendix A for examples). Using a table of random numbers[57] two random hours were selected for each week.

Preparing Staff and Users

In her specialization paper,"Biomedical Library Use Survey," Patricia Pierce pointed out the advantages of preparing your library's clientele before administering a survey. The level of cooperation is maximized when the public is forewarned of its occurrence and aware of its general purpose (ie: "We are trying to make this library easier for you to use"). Patricia handled this by distributing an "informational hand-out sheet...from the last weekday before the start of the survey"[58] and then regularly throughout the length of the time surveyed.

This sounded like a great idea to me, and being somewhat averse to handouts I began devising a bunch of desk and wall signs. The desk signs were simply an information sheet printed on colored paper, glued to a firm backing, and then folded into a triangular shape (two of the sign faces had text on them so you could read it coming or going).

The wall signs contained the same information combined with a color photocopy of a picture, glued to a firm backing, and then covered with plastic self-adhesive covers (to discourage graffiti). You'll find a sample of this on the next page.

Wall signs were positioned in spots where people would have a natural tendency to pause, wait in line, or already are trained to look for other kinds of directions. For instance, a two-sided sign was placed on the glass door at the library entrance (it can be seen even when the library is closed); one at the entrance to the book stacks (where there are other signs explaining the basic organization of the stacks); one at the entrance to the room which houses the photocopy machines (a place patrons spend a good deal of time waiting in line. Even if they use little else in the library, almost everyone takes advantage of the photocopiers. I would label this area as a prime target for signs such as these); one on the blank wall space behind each copier (what else do they have to stare at while they photocopy?), and so forth.

In order to prepare the staff of EMS for the coming survey, Karen wrote a memo attaching the schedule of survey hours and distributed it to all the department heads. The staff watched with (amused) interest as I busily set up my signs and then began passing out surveys at the appointed hours. I would say staff preparation is at least as important as user preparation. Both steps are highly recommended.

USER SURVEY

ENGINEERING/MATH SCIENCES LIBRARY

In an attempt to pinpoint the types of problems users have finding their way around this library, a survey will be conducted during selected hours over the course of the Winter Quarter 1981. The survey has been designed to take the minimum amount of time, while also allowing the maximum amount of flexibility in responses. It is being conducted as part of a graduate student research project with the cooperation of the Engineering/Math Sciences Library.

We would like to make this facility easier for you to use. Your participation will help us do so.

January 19, 1981

TO: EMS, ILL and Catalog Section Staff

FROM: Karen KA

RE: SURVEY

Johanna Johnson, Library Intern, will be handing out a survey in EMS according to the attached schedule. The survey will measure patron awareness of the services and equipment available at EMS. You shouldn't have any questions other than perhaps where the return box is. This will be kept on circ counter.

In general, do not give patrons assistance in answering questions which are for the survey. Let them answer the questions based on their current knowledge. You may, of course, respond after the questionnaire has been turned in.

If you run into a question which you are not sure you should answer, refer the question to Johanna or me.

KA/yl

UNIVERSITY OF CALIFORNIA—(Letterhead for interdepartmental use)

Conducting the Survey

Before beginning, each survey was marked with the date, time, and a unique survey number (you'll notice this number when you look at the survey comments listed in Appendix A). This way questionnaires could be returned any time over the course of the quarter without any difficulty. The survey return box, clearly marked and highly visible, was pointed out as users were handed the survey ("Just return it to that box over there"). The Circulation Department had instructions to save any surveys returned to them when the box wasn't out and route them to me.

Thirteen surveys were handed out each selected hour, which meant twenty-six were handed out each week over a period of eight weeks. These were distributed to the first thirteen users who gave an affirmative response to the question, "Could you help us fill in a survey for the Engineering Library?" Users, for the purpose of this survey, were described as anyone who walked through the entrance at the chosen times. If a patron had already filled in our questionnaire before, they were not asked to fill one in a second time. If people arrived in large bunches (as is sometimes the case when your library is located on the eighth floor, with the elevator as a popular form of transport), I handed out forms to approximately every third person.

As stated earlier, we knew this method would not provide us with a strict random sampling of the EMS user population.

What we hoped for was a cross section of EMS users over the course of the quarter---and this I think we achieved. Survey results were tallied each week (this could then be adjusted if stray surveys showed up at odd times along the way) and user comments were typed up. Karen Andrews received a copy of these results approximately every two weeks.

IV. SURVEY RECOMMENDATIONS

Orientation Problems Indicated From the Tallied Portions of the Survey

Out of the 126 who returned a survey, 101 felt they have no problem using the library now. However, only 28 of these users were aware that periodicals are stored in more than one place. Merely 4 out of the 126 indicated that most of our technical reports are not listed in the card catalog (as is actually the case). The survey shows (see Table 4) that very few are fully cognizant of the entire gamut of services available at EMS. I found it a little disconcerting that only 34 people (22 undergraduates, 7 graduates, and 5 users from other categories) expressed awareness of a technical reports assistant. This is an important service which apparently needs to be promoted more.

No matter how much people think they know about the libraries they use, there is still more they do not know. The troublesome part about a situation like this is that people who think they know don't ask questions. Therefore, we must find ways to bring these areas of ignorance to the attention of more users. This could be accomplished through one or all of the following methods:

Clearing up gray areas should be the forte of the general library guide. It might even be a good idea to increase awareness of the guide's existence with the use of small posters throughout the library. Something along the lines of:

1. "There's more to us than you think.
   Ask for a copy of the EMS library guide."
2. Black background. Small white print.
   "Still in the dark?
   Ask for the EMS library guide."

"Signs are a form of public relations. Librarians are selling libraries, library resources, and services as surely as General Foods is selling Jello."[59]

Orientation tours would represent an excellent opportunity to mention services, familiarize patrons with the locations of current periodicals, and organization of the stacks, etc. This could then be reinforced with distribution of the general guide at the end of the tour. An information sign listing services available at EMS could be placed near the front entry directory and floor plan combination.

Issues Brought Up By Comment Portions of the Survey

I tend to give more weight to this section than mere numbers would imply, because most people won't bother to take the time to write a comment unless it's something they feel strongly about. For instance, five people making a related comment (especially at different survey times) about a

TABLE 4. Services Awareness Scale

(out of 126 returned surveys)

Service:	No. Surveys:
Photocopy machines	116
Reference assistance	106
Holds	91
Searches	71
Hours & loan policies/campus libraries	65
Open access/reference materials	62
Telephone availability of materials	53
Telephone renewals	45
Computer reference	39
Microform copiers/paper	37
Telephone reference	35
Technical reports assistance	34
Interlibrary loan	33
Additional materials in storage	33
Orientation tours	32
Mail renewals	29
New books display (not available at time of survey)	28
Purchase suggestions	22
Duplication of microfiche	21
Change machines (not available at time of survey)	6
Typewriters (not available at time of survey)	6

problem can be considered significant enough to require some move to rectify it.

A few of the comments did not go into enough detail to identify the exact cause of the difficulty (although we can make some fairly accurate guesses in most cases). Survey #205 stated they had trouble "locating handbooks and some references." Do they have problems because handbooks are shelved in a special location, because they have difficulty using the card catalog, or because they don't understand the alphanumeric order of the Library of Congress call number? All three? For this reason, the numbers cited for each problem area can only be approximated and are open to interpretation. If we had more time to digest the results, totals might be redistributed a little but I believe the problems would remain basically the same. Here are some of the primary issues of concern expressed by EMS users:

1. Eleven or more users stated they had difficulty finding the right elevator to the library on their first visit. Six or more felt a sign should be posted at the fifth floor elevator or at each of the floors for the elevator that goes to the Engineering Library. There is such a sign already on the seventh floor (see Figure 1). It doesn't seem like an unreasonable request to have similar signs placed on the other floors. I realize this has been tried before unsuccessfully (vandals removed the signs) but the time has come to experiment with it again. The glass encased sign on the seventh floor may prove a more durable model.

Finding the right elevator. Survey numbers:
26, 44, 62, 69, 74, 105, 108, 124, 175, 183, 187.

Library location posted at fifth floor or each floor at elevator. Survey numbers:
6, 26, 50, 108, 125, 162.

2. Eleven or more library patrons cited noise as a chronic annoyance when they attempted to use the library. Some mentioned a need for group study areas and others a desire for increased availability of individual study areas.

Large, open tables in the main reading room are a major contributing factor to the noise problem. They are an invitation to socialize. Replacing these with study carrels would probably be a considerable improvement. "If the library is a research facility, where serious concentration is the goal, the setup should consist primarily of small tables..."[60] Signs placed on individual tables (previous to the survey) were of minimal help in alleviating the situation, but perhaps they could be tried again until more permanent solutions can be implemented. I am considering discussing the problem briefly in a "Group Study" section of the general guide (see Appendix B). While conference rooms would be a better means of localizing group study noise, the library simply does not have the facilities at the present time.

Noise and group study. Survey numbers:
P-2, 26, 30, 40, 44, 116, 123, 127, 130, 133, 178.

More study areas, seating, or individual study places.
Survey numbers:
P-1, 31, 90, 94, 133, 137, 148, 173.

3. Eleven or more indicated they found the stacks arrangement confusing (this is a problem we deal with on a frequent basis at the Reference Desk). Until the time when the stacks are reorganized, we might experiment with hanging signs in the stacks which signal the three areas (ie: books, oversize materials, periodicals). Since the shelf labeling is color coded, perhaps the signs should be handled in this fashion too.

Stacks arrangement. Survey numbers:
5, 8, 54, 82, 99, 105, 124, 156, 172, 173, 197.

4. Eight or more users mentioned they'd like to see better labeling of areas like Books, Periodicals, Photocopy Room, Technical Reports Room, etc. Survey #183 felt the signs need to be larger. Three people stated they'd like to see a directory or floor plan at the front entrance.

The Stacks and Current Periodicals section need signs which extend from the wall so they can be seen upon entering the library (see Figure 2 and Figure 3). They should be facing the direct flow of traffic. A series of three wall signs could be placed over the hallway (see Figure 4) which leads to the Photocopy Room, South Reading Room, and Technical Reports Room. Perhaps a similar series would be useful on the divider between the card catalog and the main reading room (with arrows pointing "ahead"---ie: up) until we are able to acquire larger signs. The blank wall between the pay phone and the turnstile (see Figure 5) would be a good spot for a series of 2 or 3 signs: a) Directory to major service areas---including rest rooms. b) Floor plan c) Optional: List of services available at EMS.

Better labeling of areas. Survey numbers:
1, 61, 74, 82, 99, 180, 188, 193.

More visible signs. Survey numbers:
74, 82, 180, 183, 188, 193.

Directory or floor plan by front door. Survey numbers:
P-1, P-10, 61.

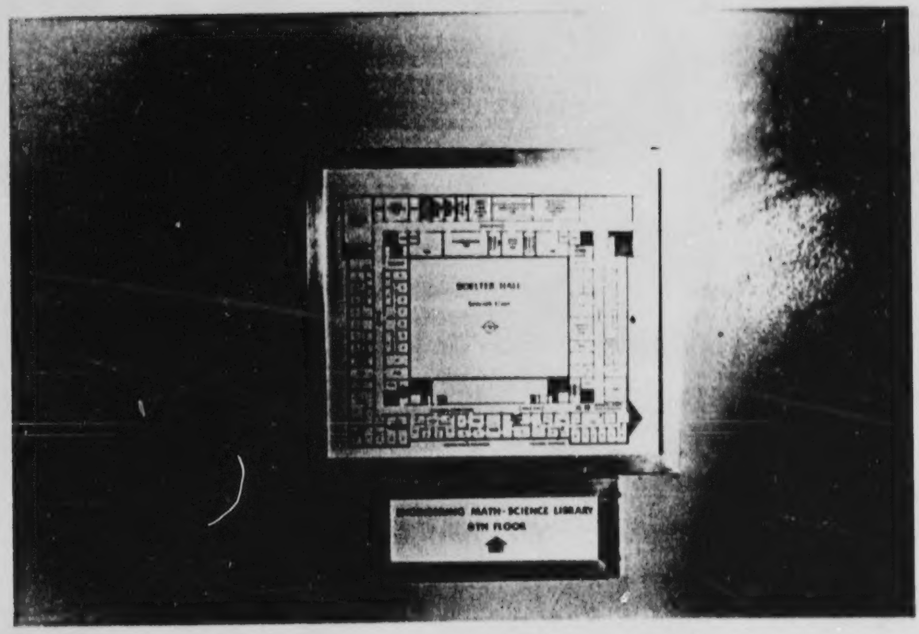

BOELTER HALL
ENGINEERING MATH-SCIENCE LIBRARY
8TH FLOOR

FIGURE 1. Sign at elevator

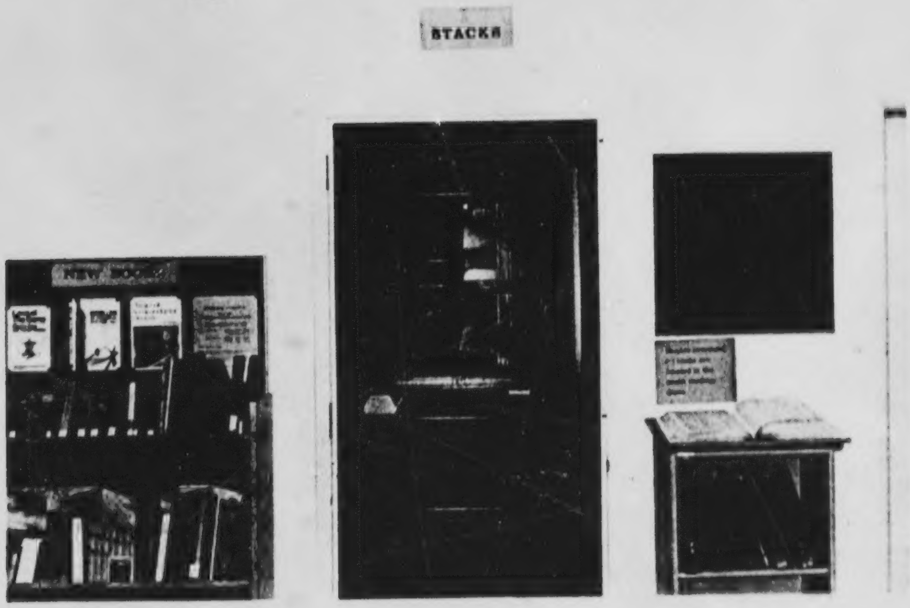

STACKS
NEW BOOKS

FIGURE 2. Stacks sign

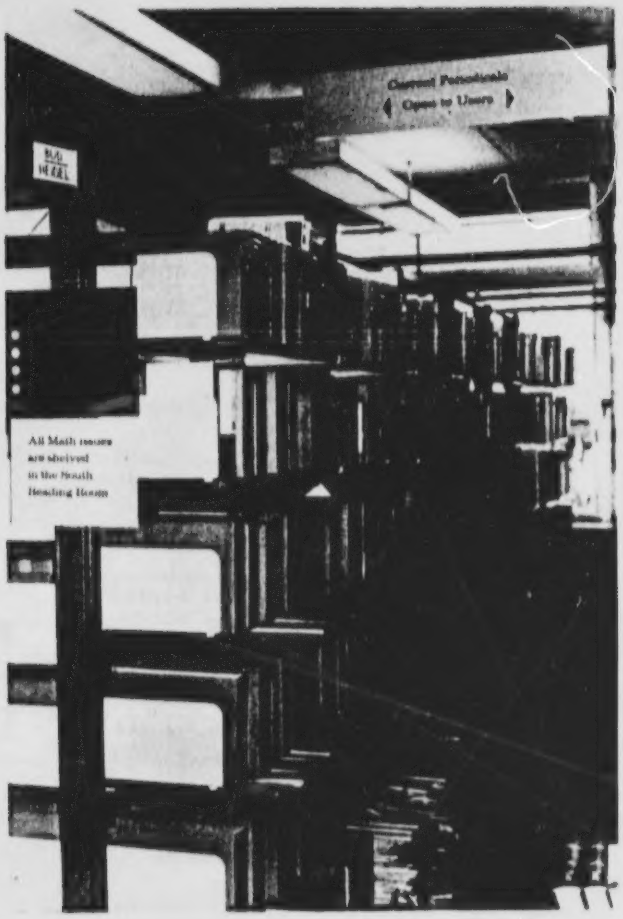
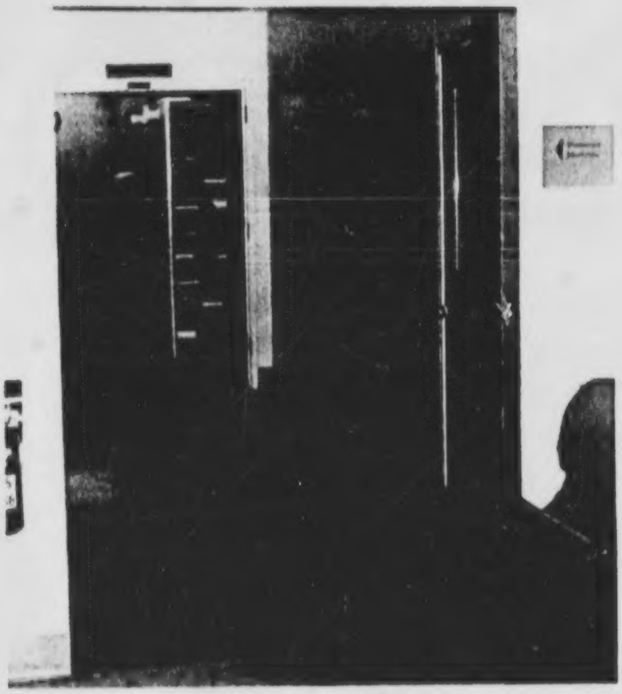

Current Periodicals
Open to Users
All Math issues
are shelved
in the South
Reading Room

FIGURE 3. Current Periodicals sign

FIGURE 4. Position for series of three wall signs: Photocopy Room, South Reading Room, and Technical Reports Room



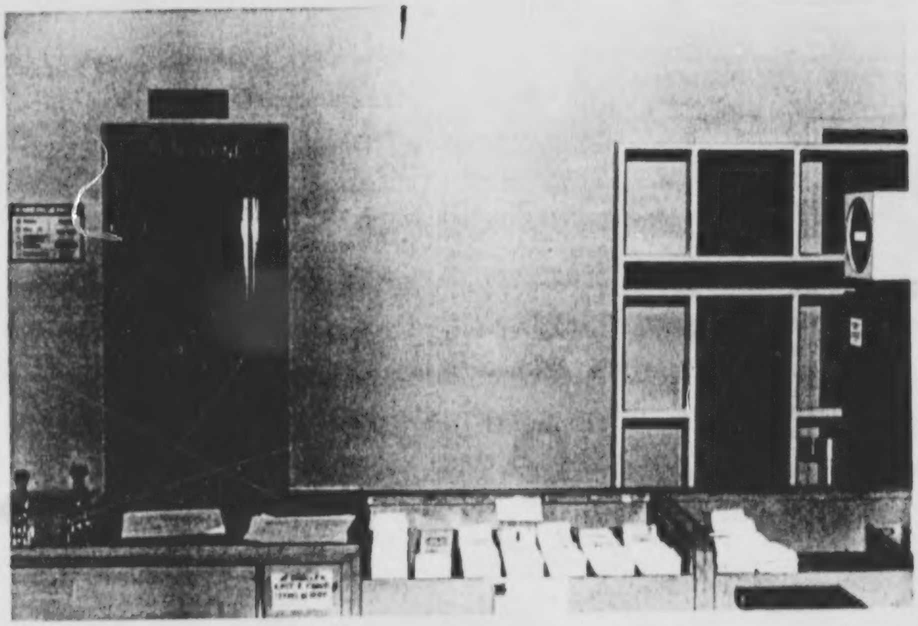


FIGURE 5. Wall awaiting Library Directory

5. Eight or more people found the call number system difficult to understand. Survey #124 bitingly noted, "Library of Congress has never made any sense to anyone." The important thing is that it is obviously meaningless to this person. Stacks arrangement and materials kept in special locations (the reference collection, pamphlets, double oversize materials, etc.) may also have contributed to this problem.

A table which relates subject areas to LC letters and an explanation of special locational symbols in the general guide may help a little (see Appendix B). A similar type of information sign could be prominently displayed in the card catalog area (and entitled "The LC Browser's List"?).

Call number system. Survey numbers:
96, 110, 124, 165, 176. 188, 191, 197.

6. Five or more patrons stated they'd like to see a better arrangement for obtaining change for the photocopy machines. Photocopying is the second highest area of library use indicated by those surveyed (see Table 5). Currently users must rely on a change machine located outside the fifth floor of Boelter Hall or nearby campus eating facilities like the Bomb Shelter (closed after 5 PM).

Even though this is a service patrons would probably greatly appreciate, it is not economically feasible for EMS at this time. The most we can do is make sure people know where they can get change when they need it. We have a new sign in the Photocopy Room which directs people to the fifth floor coin changer. A note in the general guide would be appropriate as well.

Change machines. Survey numbers:
43, 54, 61, 157, 191.

TABLE 5. Primary Library Uses Scale

(out of 126 returned surveys)

Use:	No. Surveys:
Study	96
Photocopy	70
Borrow books	53
Reference materials	47
Reserve readings	34
Browse periodicals	18
Graduate research (out of 30 surveys returned by graduates)	16
Undergraduate research (out of 84 surveys returned by undergraduates)	15
Other	7

APPENDIX A: Survey

REGULAR SESSION | UNIVERSITY OF CALIFORNIA, LOS ANGELES | REGULAR SESSION

UNIVERSITY OF CALIFORNIA, LOS ANGELES
LIBRARY SCHEDULE OF HOURS
WINTER QUARTER, 1981

Regular Session Hours During Instruction: January 12, Monday- March 15, Sunday
All Units CLOSED Monday, February 16 (President's Day) unless otherwise noted.

Library Unit	Mon-Thur	Fri	Sat	Sun	Exceptions
Arch. & Urban Planning	8:30am-9pm	8:30am-5pm	1pm-5pm	1pm-5pm	Mon., 2/16, 1pm-5pm
Art	9am-9pm	9am-5pm	9am-5pm	1pm-5pm	Mon., 2/16, 9am-5pm
Biomedical	7:45am-11pm	7:45am-9pm	9am-5pm	1pm-11pm	Mon., 2/16, 9am-11pm
Chemistry	8am-9pm	8am-5pm	1pm-5pm	1pm-9pm	Mon., 2/16, 1pm-9pm
Clark	9am-4:45pm	9am-4:45pm	Closed	Closed	
College	8am-10pm	8am-5pm	9am-5pm	12noon-9pm	Mon., 2/16, 9am-5pm
Education & Psychology	8am-10pm	8am-5pm	9am-5pm	1pm-9pm	Mon., 2/16, 9am-5pm
Engin. & Math. Sciences	8am-9pm	8am-5pm	1pm-5pm	1pm-9pm	Mon., 2/16, 1pm-9pm
English Reading Room	9am-5pm	9am-5pm	Closed	Closed	

FINAL EXAMINATIONS

UNIVERSITY OF CALIFORNIA, LOS ANGELES
LIBRARY SCHEDULE OF HOURS
WINTER QUARTER, 1981

FINAL EXAMINATIONS

Hours during Final Examinations:

Library Unit	Mon, 3/16-Thur, 3/19	Fri, 3/20	Sat, 3/21	Sun, 3/22	Mon, 3/23-Thur, 3/26	Fri, 3/27
Arch. & Urban Planning	8:30am-9pm	8:30am-5pm	1pm-5pm	1pm-5pm	8:30am-9pm	8:30am-5pm
Art	8am-10pm	8am-5pm	9am-5pm	1pm-9pm	8am-10pm	8am-5pm
Biomedical	7:45am-11pm	7:45am-12mid	9am-12mid	1pm-12mid	7:45am-12mid	7:45am-6pm
Chemistry	8am-10pm	8am-10pm	9am-5pm	1pm-10pm	8am-10pm	8am-5pm
Clark	9am-4:45pm	9am-4:45pm	Closed	Closed	9am-4:45pm	9am-4:45pm
College	8am-12mid	8am-12mid	9am-12mid	9am-12mid	8am-12mid	8am-5pm
Education & Psychology	8am-10pm	8am-5pm	9am-5pm	1pm-9pm	8am-10pm	8am-5pm
Engin. & Math. Science	8am-10pm	8am-10pm	10am-10pm	10am-10pm	8am-10pm	8am-5pm
English Reading Room	9am-5pm	9am-5pm	Closed	Closed	9am-5pm	9am-5pm

TABLE 1. Library Hours/Regular Schedule

	M	T	W	Th	F	Sa	S
8 AM	1	14	27	40	53	-	-
9	2	15	28	41	54	-	-
10	3	16	29	42	55	-	-
11	4	17	30	43	56	-	-
12	5	18	31	44	57	-	-
1 PM	6	19	32	45	58	62	66
2	7	20	33	46	59	63	67
3	8	21	34	47	60	64	68
4	9	22	35	48	61	65	69
5	10	23	36	49	-	-	70
6	11	24	37	50	-	-	71
7	12	25	38	51	-	-	72
8	13	26	39	52	-	-	73
9	-	-	-	-	-	-	-

TABLE 2. Library Hours/Holiday Week

	M	T	W	Th	F	Sa	S
8 AM	-	9	22	35	48	-	-
9	-	10	23	36	49	-	-
10	-	11	24	37	50	-	-
11	-	12	25	38	51	-	-
12	-	13	26	39	52	-	-
1 PM	1	14	27	40	53	57	61
2	2	15	28	41	54	58	62
3	3	16	29	42	55	59	63
4	4	17	30	43	56	60	64
5	5	18	31	44	-	-	65
6	6	19	32	45	-	-	66
7	7	20	33	46	-	-	67
8	8	21	34	47	-	-	68
9	-	-	-	-	-	-	-

TABLE 3. Library Hours/Finals Extended Hours

	M	T	W	Th	F	Sa	S
8 AM	1	15	29	43	57	-	-
9	2	16	30	44	58	-	-
10	3	17	31	45	59	71	83
11	4	18	32	46	60	72	84
12	5	19	33	47	61	73	85
1 PM	6	20	34	48	62	74	86
2	7	21	35	49	63	75	87
3	8	22	36	50	64	76	88
4	9	23	37	51	65	77	89
5	10	24	38	52	66	78	90
6	11	25	39	53	67	79	91
7	12	26	40	54	68	80	92
8	13	27	41	55	69	81	93
9	14	28	42	56	70	82	94

SURVEY SCHEDULE

Week #1

1/27/81 Tuesday, 9:00 AM
1/28/81 Wednesday, 8:00 AM

Week #2

2/2/81 Monday, 2:00 PM
2/5/81 Thursday, 8:00 AM

Week #3

2/14/81 Saturday, 2:00 PM
2/15/81 Sunday, 4:00 PM

Week #4

2/18/81 Wednesday, 10:00 AM
2/18/81 Wednesday, 8:00 PM

Week #5

2/24/81 Tuesday, 10:00 AM
2/27/81 Friday, 3:00 PM

Week #6

3/2/81 Monday, 1:00 PM
3/6/81 Friday, 3:00 PM

Week #7

3/11/81 Wednesday 12:00 Noon
3/12/81 Thursday 3:00 PM

Week #8

3/19/81 Thursday, 9:00 PM
3/20/81 Friday, 5:00 PM

(Final Exam Week 3/23/81 - 3/27/81)

(PRETEST)

USER SURVEY
ENGINEERING/MATH SCIENCES LIBRARY

INTRODUCTION

Please help us. We need your input so that we can determine what needs to be done to make this library easier for you to use. We are now in the process of devising new signs and guides and your views will help provide a better overall picture. If any part of the survey is ambiguous, misleading, or inappropriate please make a note to that effect.

This survey is being conducted as part of a graduate student research project with the cooperation of the Engineering/Math Sciences Library. Answer the questions as completely as you can and then deposit this form in the box marked "Return Surveys Here" located on the Circulation Desk before you leave the library. Use the back of each sheet for any general comments you'd like to make. The survey will have greater validity if you do not change your answers or discuss them with anyone else.

Thank you for your assistance.

SECTION I.

Affiliation (circle one):

1) UCLA Faculty/Acad/Mngmt
2) UCLA Undergraduate Student
3) UCLA Graduate Student
4) UCLA Extension Student
5) UCLA Alumni
6) Fee-Business Firm
7) Fee-General Public
8) UCLA Staff
9) Other. Please specify: ______________________

If you are a professor or a student, please indicate Dept. or Major: ______________________

If you are using the library this quarter for class research or class projects (not reserved readings) please list the class(es) here:

____

____

____

Note: The following section is not meant to be a test of your competence but is intended instead to measure awareness of the services offered by this library.

SECTION II.

The Engineering Library offers which of the following services?
(Circle only those numbers which apply)

1) A reference librarian to assist you during the day Monday through Friday at the Reference Desk.

2) A technical reports assistant to help you during the day Monday through Friday in the Technical Reports Room.

3) Telephone reference service.

4) Computerized reference search services.

5) Mail renewals of library materials if material is not overdue.

6) Telephone renewals of library materials if material is not overdue.

7) Telephone queries regarding the availability of materials at this library.

8) Photocopy machines.

9) Typewriter available for public use.

10) Brochures listing the hours and loan policies of other libraries on campus.

11) Allows placement of a "hold" (the book will be saved for you) on a book that has been checked out by someone else.

12) A search for any of this library's books which you can't locate.

13) InterLibrary Loan to obtain materials not available at UCLA.

14) Duplication of microfiche upon request so that you may have your own copy.

15) Open access to the reference books located in the area behind the Reference Desk (you may use them on your own).

16) Microform (eg: microfiche, microfilm, etc.) readers and printers for paper copies.

17) Orientation tours at the beginning of each quarter or on request.

18) A change machine for dollar bills.

19) Displays new books.

20) Accepts suggestions for purchases.

21) Has some of its collection in storage.

SECTION III.

1) Approximately how many times a month do you use the Engineering Library? (circle one)

A) This is my first time. B) Less than once a month. C) 1-2 times

D) 3-4 times E) 5 or more times

2) What do you use it for primarily? (circle as many as appropriate)

A) To study.

B) To use reserved readings for a class.

C) To do undergraduate research or class projects.

D) To do graduate research or class projects.

E) To browse the latest periodical literature.

F) To use reference materials (Handbooks, data tables, etc.)

G) To borrow books.

H) To photocopy.

I) Other. Specify: ______________________________

3) Did you have problems locating this library on your first visit?

A) No B) Yes

4) Did you have any difficulty finding your way around this library your first time here?

A) No B) Yes

5) If yes, please specify:
(Can you remember the kind of things you had difficulty with? What were you trying to find?)

____

____

____

6) Do you have any problems using the library now?

A) No B) Yes

7) If yes, what are they?
(Again, please be specific.)

____

____

8) Are there any signs which are not clearly posted or easy to understand?

A) No B) Yes

9) If yes, please specify which one(s) and what you feel the problem might be.

____

____

10) Are there any places you think there should be signs where there are none presently?

A) No B) Yes

11) If yes, please specify ______________________________

____

12) Do you know whether unbound periodical issues are kept in more than one area of this library? They are kept in

A) One place B) More than one place C) Don't know

13) Do you know if most of the technical reports held by this library are listed in its card catalog?

A) Most are listed C) Most are not listed C) Don't know

Any other comments or questions? Please enter them on the back of this sheet. Thank you once again for your participation.

USER SURVEY

ENGINEERING/MATH SCIENCES LIBRARY

INTRODUCTION

Please help us. We need your input so that we can determine what needs to be done to make this library easier for you to use. We are now in the process of devising new signs and guides and your views will help provide a better overall picture.

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Thank you for your assistance.

SECTION I.

Affiliation (circle one):

1) UCLA Faculty/Acad/Mngmt
2) UCLA Undergraduate Student
3) UCLA Graduate Student
4) UCLA Extension Student
5) UCLA Staff
6) UCLA Alumni
7) Fee-Business Firm
8) Fee-General Public
9) Other. Please specify: ____

If you are a professor or a student,
please indicate Dept. or Major: ______________________________________

If you are using the library this quarter for class research or class projects (not reserved readings) please list the class(es) here:

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____

Note: The following section is not meant to be a test of your competence but is intended instead to measure awareness of the services offered by this library.

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9) Typewriter available for public use.

10) Brochures listing the hours and loan policies of other libraries on campus.

11) Allows placement of a "hold" (the book will be saved for you) on a book that has been checked out by someone else.

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15) Open access to the reference books located in the area behind the Reference Desk (you may use them on your own).

16) Microform (eg: microfiche, microfilm, etc.) readers and printers for paper copies.

17) Orientation tours at the beginning of each quarter or on request.

18) A change machine for dollar bills.

19) Displays new books.

20) Accepts suggestions for purchases.

21) Has some of its collection in storage.

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B) To use reserved readings for a class.

C) To do undergraduate research or class projects.

D) To do graduate research or class projects.

E) To browse the latest periodical literature.

F) To use reference materials (Handbooks, data tables, etc.)

G) To borrow books.

H) To photocopy.

I) Other. Specify: ______________________________

3) Did you have problems locating this library on your first visit?

A) No B) Yes

4) Did you have any difficulty finding your way around this library your first time here?

A) No B) Yes

5) If yes, please specify: (Can you remember the kind of things you had difficulty with? What were you trying to find?)

____

____

____

6) Do you have any problems using the library now?

A) No B) Yes

7) If yes, what are they?
(Again, please be specific.)

____

____

8) Are there any signs which are not clearly posted or easy to understand?

A) No B) Yes

9) If yes, please specify which one(s) and what you feel the problem might be.

____

____

10) Are there any places you think there should be signs where there are none presently?

A) No B) Yes

11) If yes, please specify ____________________________

____

12) Do you know whether unbound periodical issues are kept in more than one area of this library? They are kept in

A) One place B) More than one place C) Don't know

13) Do you know if most of the technical reports held by this library are listed in its card catalog?

A) Most are listed B) Most are not listed C) Don't know

Any other comments or questions? Please enter them on
the back of this sheet. Thank you for your participation.

SURVEY RAW DATA

*SECTION I - AFFILIATION

Date: Time:	PRETEST	1/27/81 9 AM	1/28/81 8 AM
1) UCLA Fac/Acad/Mgmt	0	1	0
2) UCLA Undergrad	6	4	7
3) UCLA Grad	2	2	0
4) UCLA Extension	1	0	0
5) UCLA Staff	0	1	0
6) UCLA Alumni	0	0	0
7) Fee-Business	0	0	0
8) Fee-Public	0	0	0
9) Other	1 (unspecified)	0	0
Total Returned:	10	8	7

*Section numbers refer to numbered sections of the survey.

*SECTION I - AFFILIATION

Date: Time:	2/2/81 2 PM	2/5/81 8 AM	2/14/81 2 PM
1) UCLA Fac/Acad/Mgmt	0	0	0
2) UCLA Undergrad	4	8	2
3) UCLA Grad	1	1	2
4) UCLA Extension	0	0	0
5) UCLA Staff	0	0	0
6) UCLA Alumni	1	0	2
7) Fee-Business	0	0	0
8) Fee-Public	0	0	0
9) Other	0	0	1 (Self-employed Consultant)
Total Returned:	6	9	7

*Section numbers refer to numbered sections of the survey.

*SECTION I - AFFILIATION

Date: Time:	2/15/81 4 PM	2/18/81 10 AM	2/18/81 8 PM
1) UCLA Fac/Acad/Mgmt	0	0	1
2) UCLA Undergrad	7	4	2
3) UCLA Grad	2	2	1
4) UCLA Extension	0	0	0
5) UCLA Staff	0	0	0
6) UCLA Alumni	2	0	1
7) Fee-Business	0	0	0
8) Fee-Public	1	0	0
9) Other	0	0	1 (UC Berkeley Alumni)
Total Returned:	12	6	6

*Section numbers refer to numbered sections of the survey.

*SECTION I - AFFILIATION

Date: Time:	2/24/81 10 AM	2/27/81 3 PM	3/2/81 1 PM
1) UCLA Fac./Acad/Mgmt	0	0	0
2) UCLA Undergrad	6	5	5
3) UCLA Grad	3	1	2
4) UCLA Extension	0	0	0
5) UCLA Staff	0	0	0
6) UCLA Alumni	0	0	0
7) Fee-Business	0	0	0
8) Fee-Public	0	0	0
9) Other	1 (Visiting Scholar)	0	0
Total Returned:	10	6	7

*Section numbers refer to numbered sections of the survey.

*SECTION I - AFFILIATION

Date: Time:	3/6/81 3 PM	3/11/81 12 Noon	3/12/81 3 PM
1) UCLA Fac/Acad/Mgmt	0	0	0
2) UCLA Undergrad	4	7	3
3) UCLA Grad	2	2	7
4) UCLA Extension	0	0	0
5) UCLA Staff	0	0	0
6) UCLA Alumni	0	0	0
7) Fee-Business	0	0	0
8) Fee-Public	0	0	0
9) Other	1 (Visiting Scholar/ Cryogenics)	0	0
Total Returned:	7	9	10

*Section numbers refer to numbered sections of the survey.

*SECTION I - AFFILIATION

Date:	3/19/81	3/20/81
Time:	9 PM	5 PM
1) UCLA Fac/Acad/Mgmt	0	0
2) UCLA Undergrad	9	7
3) UCLA Grad	0	0
4) UCLA Extension	0	0
5) UCLA Staff	0	0
6) UCLA Alumni	0	0
7) Fee-Business	0	0
8) Fee-Public	0	0
9) Other	0	0
Total Returned:	9	7

*Section numbers refer to numbered sections of the survey.

SECTION I - CLASS RESEARCH, ETC.

Date: Time:	Major	Classes/Projects
PRETEST	Electrical Engr	Engr 109
	Electrical Engr	Engr 199, Independent studies
1/27/81 9 AM	Materials Engr	Oxidation of metals; polymer science
	Civil Engr	Engr 184b
1/28/81 8 AM	Material Science	E146A - Intro to ceramics
	Engr	Engr 162B
2/14/81 2 PM	Computer Science	CS243A
2/15/81 4 PM	Electrical Engr	E199B, E110B
2/18/81 10 AM	Computer Engr	CS172
2/18/81 8 PM	Electrical Engr	215E, 216B
2/24/81 10 AM	Electrical Engr	Engr 116A
3/2/81 1 PM	Engr Systems	Engr 284A, Engr 284D
3/6/81 3 PM	Math	Math 143
3/11/81 12 Noon	Engr Systems	Engr 122A
	Mechanical Engr	E162B, E157B
	Nuclear Engr	CNTE 236C
	Electrical Engr	Engr 105A
3/12/81 3 PM	Env Sci & Engr	AUP 261A
	Electrical Engr	CS&EEM 258B, EE216B

SECTION I - CLASS RESEARCH, ETC.

	Major	Classes/Projects
Date: 3/19/81 Time: 9 PM	Psychology	English 142A
	Electrical Engr	E116B

SECTION II - SERVICES: TOTALS*

	Undergrad	Grad	Other	Total
1) Reference Assistance	68	26	12	106
(Pretest)**	(6)	(2)	(1)	(9)
2) Technical Reports	22	7	5	34
(Pretest)	(1)	(1)		(2)
3) Telephone Reference	25	7	3	35
(Pretest)	(1)	(2)		(3)
4) Computerized Reference	22	12	5	39
(Pretest)	(4)	(2)		(6)
5) Mail Renewals	17	9	3	29
(Pretest)	(1)	(1)		(2)
6) Telephone Renewals	30	10	5	45
(Pretest)		(2)		(2)
7) Telephone Avail. of Materials	33	13	7	53
(Pretest)	(3)	(2)		(5)
8) Photocopy Machines	82	23	11	116
(Pretest)	(6)	(2)		(8)
9) Typewriters	4	2		6
(Pretest)				
10) Hours, etc. Campus Libs.	43	15	7	65
(Pretest)	(4)	(2)		(6)
11) Holds	59	22	10	91
(Pretest)	(5)	(2)		(7)

*Totals indicate number of participants selecting an answer.
**Pretest totals have been kept separate from other totals.

SECTION II - SERVICES: TOTALS

	Undergrad	Grad	Other	Total
12) Searches	46	16	9	71
(Pretest)	(3)	(2)		(5)
13) ILL	20	8	5	33
(Pretest)	(1)	(2)		(3)
14) Duplication of Fiche	11	5	5	21
(Pretest)	(1)	(1)		(2)
15) Open Access Ref. Materials	44	12	6	62
(Pretest)	(2)	(2)		(4)
16) Microform Copiers/Paper	23	9	5	37
(Pretest)	(1)	(2)		(3)
17) Orientation Tours	26	6		32
(Pretest)	(1)	(1)		(2)
18) Change Machine	4	2		6
(Pretest)				
19) New Books Display	16	10	2	28
(Pretest)				
20) Purchase Suggestions	9	8	5	22
(Pretest)	(2)	(1)		(3)
21) Materials in Storage	23	7	3	33
(Pretest)		(2)		(2)

SECTION III - LIBRARY USAGE: TOTALS

		Undergrad	Grad	Other	Total
2a)	Study	77	13	6	96
	(Pretest)	(6)		(1)	(7)
2b)	Reserved Rdgs	27	7		34
	(Pretest)	(1)			(1)
2c)	Undergrad Research	14		1	15
	(Pretest)	(2)			(2)
2d)	Grad Research		16		16
	(Pretest)		(2)		(2)
2e)	Browse Periodicals	9	6	3	18
	(Pretest)	(1)			(1)
2f)	Reference Materials	25	10	12	47
	(Pretest)	(3)	(1)		(4)
2g)	Borrow Books	27	17	9	53
	(Pretest)	(2)			(2)
2h)	Photocopy	57	13		70
	(Pretest)	(4)			(4)
2i)	Other	*6	**1		7
	(Pretest)				

*"Find people."
"Sleep in the stacks."
"To see homework solutions."
"Check out homework solutions."
"Homework solutions."
"Copy other people's homework/talk."

**"Sleep."

SECTION III - PROBLEMS

	Undergrad	Grad	Other	Total
3) Locating Library First Visit				
A) No	37	19	9	65
(Pretest)	(4)	(2)		(6)
B) Yes	47	8	4	59
(Pretest)	(2)		(1)	(3)
4) Finding Way Around First Visit				
A) No	62	17	9	88
(Pretest)	(3)	(1)	(1)	(5)
B) Yes	21	11	4	36
(Pretest)	(3)	(1)		(4)
6) Using Library Now				
A) No	67	23	11	101
(Pretest)	(3)	(1)	(1)	(5)
B) Yes	13	4	2	19
(Pretest)	(3)			(3)

SECTION III - LOCATION/ACCESS AWARENESS: TOTALS

	Undergrad	Grad	Other	Total
12) Unbound Periodicals				
A) One Place	14	4	2	20
(Pretest)	(3)			(3)
B) More Than One Place	12	8	8	28
(Pretest)	(1)			(1)
C) Don't Know	55	13	2	70
(Pretest)	(1)	(2)	(1)	(4)
13) Technical Reports Listed/Card Catalog				
A) Most Listed	14	6	5	25
(Pretest)				
B) Most Not Listed	1	2	1	4
(Pretest)		(2)		(2)
C) Don't Know	64	16	6	86
(Pretest)	(5)		(1)	(6)

SURVEY COMMENT INDEX

Survey No.:	Affiliation:	Question Nos.:
P-1	Math/Undergrad	5, 7, 11
P-2	Electrical Engr/Undergrad	11, Misc C
P-5	Electrical Engr/Undergrad	5, 7
P-6	Math/Computer Sci/Undergrad	5, 7, 11
P-10	Library Sci/Grad	5, 9, 11
1	UCLA Staff	5, 11
2	Atmospheric Sci/Grad	Misc C
5	Mechanical Engr/Undergrad	5
6	Chemistry/Undergrad	11
8	Materials Engr/Grad	5
12	UCLA Undergrad	11
25	Mechanical Engr/Undergrad	5, Misc C
26	Electrical Engr/Undergrad	5, Misc C
30	Biology/Undergrad	11
31	Aerospace Engr/Undergrad	7
35	UCLA Alumni	11, Misc C
40	Heat & Mass Transfer/Grad	Misc C
43	Math/Computer Sci/Undergrad	Misc C
44	Materials Sci/Undergrad	5, Misc C
50	Engr/Undergrad	11
54	UCLA Alumni	5, 9, 11, Misc C

Survey No.:	Affiliation:	Question Nos.:
56	UCLA Alumni	11
61	Engr/Undergrad	5, 7, 11, Misc C
62	Electrical Sci/Grad	5, 9, 11, Misc C
63	Self-employed Consultant	7, Misc C
68	Engr/Grad	7
69	Engr/Undergrad	5
74	Pre-biology/Undergrad	5, 7, 11
77	Chemistry	5
82	Computer Engr/Undergrad	5, 11
90	UCLA Undergrad	11
92	Electrical Engr/Undergrad	5
94	Electrical Engr/Grad	11
96	UCLA Alumni	5
99	System Sci/Visiting Scholar	5, 7, 11
105	Electrical Engr/Undergrad	5
108	Mechanics & Structures/Grad	5, 11
110	Engr Systems/Undergrad	5
116	Electrical Engr/Undergrad	Misc C
123	Chemical Engr/Undergrad	7
124	Earth & Space Sci/Grad	5
125	Civil Engr/Undergrad	7, 11, Misc C
127	Mechanical Engr/Undergrad	5, 11, Misc C
130	Electrical Engr/Undergrad	9, Misc C
132	Engr Systems/Grad	7
133	Math/Computer Sci/Undergrad	Misc C

Survey No.:	Affiliation:	Question Nos.:
137	Civil Engr/Undergrad	7
142	Materials Sci/Grad	5
148	Mechanical Engr/Undergrad	Misc C
149	Mechanical Engr/Undergrad	7
151	Math/Undergrad	Misc C
153	Mechanics & Structures/Grad	5
156	Electrical Engr/Grad	9
157	Mechanical Engr/Undergrad	Misc C
159	Nuclear Engr/Grad	7
165	Mechanical Engr/Undergrad	5, 7, 9
168	Engr Systems/Ungergrad	7
170	Electronic Engr/Undergrad	11
172	Environmental Sci/Grad	5, Misc C
173	Electrical Engr/Undergrad	7, Misc C
175	Electrical Engr/Grad	5, 11, Misc C
176	Electrical Engr/Grad	5, 11
178	Mechanics & Structures/Grad	5, 7, 11, Misc C
180	Engr/Undergrad	11
182	Chemistry/Grad	Misc C
183	Electrical Engr/Undergrad	5, 11
185	Electrical Engr/Undergrad	7
186	Computer Sci/Undergrad	5, 7
188	Psychology/Undergrad	5, 9, 11
191	Chemistry/Undergrad	5, Misc C
192	Chemical Engr/Undergrad	11, Misc C

Survey No.:	Affiliation:	Question Nos.:
193	Civil/Mechanical Engr/Undergrad	9, 11
197	Chemical Engr/Undergrad	5
205	Engr/Undergrad	7

5. DIFFICULTIES FINDING THEIR WAY AROUND THE LIBRARY ON THE FIRST VISIT.

Date/Time:	Survey No./Comments:	
PRETEST	#P-1	Just places to go to escape people on busy days.
	#P-5	I had problems discovering which periodicals were available, and also about discovering which periodicals had the necessary articles (in this case articles pertaining to A/D conversion.
	#P-6	To find out the special books only known to the field. (paraph)*
	#P-10	Locating certain bound journals---the shelving is inconsistent. Locating reference books, again, the shelving is strange.
1/27/81 9 AM	#1	Where periodicals? Where current periodicals?
	#5	The order in which the stacks are arranged.
	#8	When I find the code number of the books I still don't know where they are located. Which floor should I go (in the store room)? The signs are not that clear.
1/28/81 8 AM	#26	It's hard to locate this library because there is only one elevator going up here. I think it would be better if we have signs to indicate which one can take people up here.
2/5/81 8 AM	#44	Finding the library itself was somewhat difficult. If you didn't take the correct elevator, you didn't find the library.
2/14/81 2 PM	#54	The correct level in the stacks for bound periodical---call number I was seeking.
	#61	There should be a map at the counter clearly stating where everything is (eg: copy machines, study stacks, magazines, etc.).

*Survey comments have been typed "as is" except where paraphrasing was necessary for clarity (often for non-native speakers). "Paraph" is used to indicate paraphrased comments.

5. DIFFICULTIES FINDING THEIR WAY AROUND THE LIBRARY ON THE FIRST VISIT. (cont'd)

Date/Time:	Survey No./Comments:	
2/14/81 2 PM (cont'd)	#62	This floor is not linked by a passage to other floors. You can access it only through elevator or stairs. I was on 6th or 7th floor and I really got lost, till the time I came to 5th floor and used the stairs. I have also seen one lady get lost this same way. I directed her in the same way (ie: to go to the 7th floor, take the elevator right under the library).
2/15/81 4 PM	#69	I had difficulty going to the library!
	#74	Finding the elevator to get here. Finding photocopy machines. No change machines. Find periodicals.
	#77	Finding books in the stacks.
2/18/81 10 AM	#82	Indexes and location of articles, papers, etc. Didn't understand organization of "stacks" (eg: periodicals in different section from books).
2/18/81 8 PM	#92	I got lost in the Math/Science building.
	#96	Hard numbering system for locating books.
	#99	Call numbers of some journals mixed up with books.
2/24/81 10 AM	#105	Only one stair case leads to this 8th floor library---which one? was my problem.
		Confused as to where to find book as opposed to the periodicals or reports in book form. Both have same call numbers, but are in different locations. I was looking for books, thought they were all checked til I figured out there is a book section too.
	#108	First time I came here, I could not find the right elevator to get here. I got three wrong elevators and then finally got in the right one and found here. Because the orientation of this building (B.H.) is so easy to confuse, I hope there will be some more effective signs to locate where the visitor is and how to find the right way which he or she wants.
	#110	The numbering system for the books.

5. DIFFICULTIES FINDING THEIR WAY AROUND THE LIBRARY ON THE FIRST VISIT. (cont'd)

Date/Time:	Survey No./Comments:	
2/27/81 3 PM	#124	Only one elevator to library. Library of Congress has never made any sense to anyone. Also it's difficult to decide if certain material is periodical---book---oversized---.
	#127	I was looking for books. Your stacks area is a mess. I can understand that the mess is caused primarily by library users (us) but perhaps you should hire a weekend shelf reader or something to keep books straight.
3/2/81 1 PM	#142	Just trying to reaquaint myself with the use of a library.
3/6/81 3 PM	#153	Locating journals.
3/11/81 12 Noon	#165	Book shelf locations are confusing.
3/12/81 3 PM	#172	Why are periodicals separated from books on the three levels?
	#175	Only one elevator exiting at the 8th floor gives access to library (spent time going up and down other elevator).
	#176	The codes confuse me.
	#178	After 5 years I still have difficulty finding things. The staff is always helpful though.
3/19/81 9 PM	#183	Due to disconnection of the eighth floor, go around and around.
	#187	Which elevator can reach the library.
	#188	Hard to find books---categorizing system unclear.
	#191	I can't find the book according to the reference number.
3/20/81 3 PM	#197	Stacks were arranged differently than other libraries I had used.

7. PROBLEMS USING THE LIBRARY NOW.

Date/Time:	Survey No./Comments:	
PRETEST	#P-1	Tables are not suitable for individual study. Tables need refinishing, study booths badly graffitti'd, more individual study booths needed.
	#P-5	It's not that I have a lot of trouble, just that I don't feel real comfortable or confident that I will find what I need.
	#P-6	Problems finding books by subject. (paraph)
1/28/81 8 AM	#25	The periodicals (like Engineering Index).
2/2/81 2 PM	#31	Sometimes it's hard to find a seat for two people.
2/14/81 2 PM	#61	I don't know what some of the goofy rooms are.
	#63	Open only ½ day on Saturdays.
2/15/81 4 PM	#68	Don't use most of its resources, though.
	#74	Finding books.
2/18/81 8 PM	#99	Some special journals or magazines---is not easy to find out the call numbers.
2/27/81 3 PM	#123	NOISE. HOURS TOO SHORT.
	#125	I'm still not using the library to its fullest capacity.
3/2/81 1 PM	#132	The books are not in their place. They are returned there real slow and late.
	#137	There are not enough study carrols.
3/6/81 3 PM	#149	Location of pamphlets.

7. PROBLEMS USING THE LIBRARY NOW. (cont'd)

Date/Time:	Survey No./Comments:	
3/11/81 12 Noon	#159	It closes at 9:00 PM weekdays.
	#165	Using reference books. (paraph)
	#168	I usually don't use the library to do research.
3/12/81 3 PM	#173	Sometimes, I encounter problems trying to find an available seat.
	#178	Noise! Main reading room is like a social club.
3/19/81 9 PM	#185	Many books are misplaced and hard to find.
	#187	Locating periodicals.
3/20/81 5 PM	#205	Locating handbooks and some references.

9. SIGNS WHICH ARE NOT CLEARLY POSTED OR EASY TO UNDERSTAND.

Date/Time:	Survey No./Comments:	
PRETEST	#P-10	Unless explained, the signs in the stacks are confusing.
2/14/81 2 PM	#54	Bound periodical call number---signs now used require study. I'm one to just charge ahead (trial and error), rather than invest time in analyzing signs.
	#62	There should be signs at every elevator which tell you how to get to the Engineering Library. I don't find any now. (paraph)
2/27/81 3 PM	#130	The signs telling which call numbers are on each of the three levels. It is somewhat confusing that books from QC 1 to QC 800 are on a different level than the other books with QC call numbers.
3/6/81 3 PM	#156	Sometimes finding journals is difficult in the stacks. (paraph)
3/11/81 12 Noon	#165	Each floor should have signs regarding call numbers for each floor.
3/19/81 9 PM	#188	Reference signs to books.
	#193	Where the books are kept.

11. PLACES WHERE THERE SHOULD BE SIGNS WHERE THERE ARE NONE NOW.

Date/Time:	Survey No./Comments:	
PRETEST	#P-1	Perhaps a map at the entrance.
	#P-2	Close bathrooms.
	#P-6	I don't know how to find the new books.
	#P-10	A floor plan specifying materials would be helpful.
1/27/81 9 AM	#1	Need a sign specifying way to periodical room, identifying it at room itself "South Reading Room" (not specific).
	#6	Signs on each floor of Boelter directing proper way to library (ie: which elevator and floor).
	#12	Study area.
2/2/81 2 PM	#30	"No socializing in the library please." Sometimes students in the library get too noisy for study. It's not good for them neither is good for other studious people.
	#35	If any of the services listed in set II are available and are uncircled---I would like a sign to inform me.
2/5/81 8 AM	#50	Location of the library should be posted at the 5th floor.
2/14/81 2 PM	#54	I was not aware of a dollar bill changer.
	#56	Pamphlet area.
	#61	All over the place.
	#62	Elevators.
2/15/81 4 PM	#74	Where things are---books, periodicals, magazines.

11. PLACES WHERE THERE SHOULD BE SIGNS WHERE THERE ARE NONE NOW. (cont'd)

Date/Time:	Survey No./Comments:	
2/18/81 10 AM	#82	Reference areas for papers, reports, and periodicals held in EMS Library.
	#90	Need more seats for students.
2/18/81 8 PM	#94	Private study places.
	#99	Distinguish the journals and books.
2/24/81 10 AM	#108	As you mentioned in section II, I have no idea about those except I had circled.
2/27/81 3 PM	#125	Perhaps one on the 5th floor of this building indicating where the library is. It has to be big. From this survey, I gather there is a tour of the library at the beginning of a quarter. Perhaps a sign that reads, "Free tour of the Engineering Library by request ——enquire at the desk" can be posted so that newcomers can request tours and explanation of all services. If conducting a tour upon each request is too much of a burden, perhaps it can be arranged so that a tour is conducted when there is a certain number of requests (say 10 - 15) or one per week whichever occurs earlier (first).
	#127	QUIET signs on the walls for dedicated students trying to study through the loud tone of voice of inconsiderate people. Obviously your table quiet cards didn't work.
3/12/81 3 PM	#170	It is easy to pass by the stacks elevator. Perhaps a sign would call more attention to it.
	#175	People who understand that the library is on the eighth floor must have further directions as to which elevator exits at the library.
	#176	"NO EATING"
	#178	QUIET!!! in the "reading" room.
	#180	Sign needed for photocopy machine area visible in main study area.

11. PLACES WHERE THERE SHOULD BE SIGNS WHERE THERE ARE NONE NOW. (cont'd)

Date/Time:	Survey No./Comments:	
3/19/81 9 PM	#183	The signs need to be larger.
	#188	General signs to determine more clearly where books are.
	#192	Signs listing floor of call letters should be posted at stack entrance, not up or down a floor, as materials are invariably in the other direction.
	#193	Sleeping/Rest Area

MISCELLANEOUS COMMENTS.

Date/Time:	Survey No./Comments:	
PRETEST	#P-2	Even though the library placed signs on each table last quarter, people are still rude and inconsiderate by talking while others study. Maybe section the main room so people can talk and the back room for quiet study.
1/27/81 9 AM	#2	The library is rather ill equipped with the materials pertaining to the Atmospheric Sciences. The library is either incapable or neglecting in coping with recent advancements in the research field and thus does not have many of the publications (recent ones) of the American Meteorological Society and other related conferences, World Meteorological Organization reports, Global Atmospheric Research Program reports, Monsoon experiment reports, and the proceedings of the many conferences (national and international) which are held every year and the technical reports from various universities and institutions, etc.
1/28/81 8 AM	#26	I feel that something has to be done to keep people from unnecessary conversation. This should be a quiet place to study. Maybe, once in awhile, one of the librarians can go out and remind the people here to lower their voices.
2/2/81 2 PM	#35	This is a very well run library---perhaps the best of which I am aware!
2/5/81 8 AM	#40	I'm only here to study and use homework solutions! My only complaint is that I wish it could be more quiet in here sometimes!
	#43	I think it would be very helpful for the students, if the library would place a change machine for dollar bills in the room where the photocopy machines are located.

MISCELLANEOUS COMMENTS. (cont'd)

Date/Time:	Survey No./Comments:	
2/5/81 8 Am (cont'd)	#44	At times, especially during the morning, the library is a good place to study. But from 10:00 on, it becomes progressively louder. It's obvious from the presence of the small orange signs on the tables that you've tried to reduce the noise level, but I don't think they've made much of an impact. Maybe there's something else you could do.
2/14/81 2 PM	#54	This library is much easier to be productive in than others at UCLA. I rate Biomed Library as good also. GSM (Management) Library is the worst by far—everything behind restricted areas, incompetent help, and necessity to check out many of the reference items prior to photocopying pages. EMS has intelligent, helpful staff; it has considered the physical problems of doing research and has provided scissors, paper cutter, etc. It is just well organized generally for research work.*
	#61	PUT IN A CHANGE MACHINE.
	#62	I am basically in electronic engineering. I have seen that most of the books are not relevant to students in this area (e.g. there is a book Pulse, Digital & Switching Waveform by Millman & Taub. Its 1965 edition is available only. The book has been reprinted by the same author using modern technology but that is not available).
	#63	The staff in this library are exceptionally helpful and good natured. They make it a pleasure to work here—ie conduct research.
2/24/81 10 AM	#116	How about a separate section where students are allowed to talk—perhaps in the back near the technical reports room—so that we can have study groups but not disturb other library users.

*No, we did not pay this person to write that.

MISCELLANEOUS COMMENTS. (cont'd)

Date/Time:	Survey No./Comments:	
2/27/81 3 PM	#125	This is my third time here. I've been attending UCLA for 5 quarters but didn't know exactly where the Engineering Library was located until this quarter. When I was told where the building was located I found it with ease. However, I have not had full use of its services.
	#127	I strongly believe that engineers use this library more than any other students. Yet EMS doesn't have a conference room or at least I don't know of one. Often students find it necessary to discuss an issue or problem---and they have no where to go, so they freely whisper across the table. But when you have 120 students whispering softly across the table it can get extremely loud. I can not emphasize the importance of a quiet library. Many students, I feel, have difficulty thinking at home or other places where distractions are encountered frequently. But when an engineering student trys to study in EMS and can't do so due to excessive noise caused by inapproptiate facilities I think that is a SHAME! Please! If possible try to rearrange some part of this library for conferences and discussions. An Engineer (Oriental) P.S. If you don't believe it gets loud here stick around approximately 11:00 AM - 1:00 PM.
	#130	There is a large problem with noise in the study area. People seem to come to the EMS Library to socialize instead of study.
3/2/81 1 PM	#133	The only problem I seem to encounter at times is the noise created by some students who sit in groups. The library is somewhat open (i.e. there are not very many individual tables where one could study alone), so it's quite difficult studying in a large table with a group of people talking.
3/6/81 3 PM	#148	This library is over crowded---too many students, too little space, and too few books and periodicals.
	#151	Should hire more pretty and younger librarians.

MISCELLANEOUS COMMENTS. (cont'd)

Date/Time:	Survey No./Comments:	
3/11/81 12 Noon	#157	A change machine for dollar bills would be nice.
3/12/81 3 PM	#172	My general feeling is that the amount of help a student obtains is dependent upon which librarian you happen to ask (or sometimes assigned to). Obviously, some librarians are much more aware about available resources. Are librarians required to take refresher courses once they are employed just to keep up with new advances in their field. I tend to believe that a librarian is a profession and so the individual should be responsible for reviewing the current literature just so as to be able to perform his/her duties effectively and efficiently.
	#173	The desks in the stacks are dirty---need to be cleaned. I feel there should be more desks in the stacks.
	#175	I have found the library personnel friendly, courteous, pleasant, and helpful. Thank you.
	#178	The noise problem is out of hand. I'm tired of shushing people around me. They act like I'm in the wrong. I think a proctor, a student library employee should quietly, courteously, firmly enforce quiet. And I mean like, No talking! People can pass notes or go outside. Bomb Shelter for talking. Library for reading, writing, thinking. Good luck. Also somebody should go around and erase or obliterate the racially and sexually insulting graffiti.
	#182	In general this is a good library considering both amounts of information and ease of use.
3/19/81 9 PM	#191	It would be helpful for the students if a change machine for dollar bills was installed.
	#192	Thursday nite of tenth week is lousy timing for surveys of this sort!

APPENDIX B: General Guide

LIBRARY GUIDE EVALUATION SHEET

Library/Institution____

Title____

Date of publication (if any)____________________

CONTENT:

___ Table of contents
___ Index
___ Names of staff heads with work phone numbers
___ Library hours
___ Introductory Material
  ___ History
  ___ Primary user groups or statement of purpose
  ___ Describes major holdings
  ___ Describes special collections
  ___ Indicates size of collection
___ Rules and regulations
  ___ Borrowing privileges
  ___ Circulation rules
  ___ Reserve system rules, etc.
___ Services
  ___ Reference
  ___ Computerized searches
  ___ ILL
  ___ Photocopy
  ___ Other
___ Card catalog
  ___ Organization (Dictionary/Divided)
  ___ Explanation of catalog cards
  ___ "   " filing rules
  ___ LCSH samples
___ Classification system
  ___ System used mentioned
  ___ LC Chart/ Dewey Chart
  ___ Call number explained
___ Reference materials
  ___ Major indexes listed
  ___ Other reference materials appropriate to user group listed
___ Library facilities described
(equipment, study areas, bathrooms, etc.)
___ Indicates types of materials available
(microfiche, microfilm, books, periodicals, cassettes, etc.)
___ Abbreviations or terms explained
  ___ Text
  ___ Glossary
___ Campus map
___ Floor plan
___ List of other libraries of special interest to user groups

FORMAT:

Number of pages ________

Size ____________________

Handbook (HB) or Information sheet (IS) ______________

Effective use of:
- ___ Illustrations/photos
- ___ Color
- ___ Paper texture
- ___ Overall lay out
- ___ Headings for sections

Writing style:
- ___ Clean and concise
- ___ Appropriate for audiance
- ___ Light tone or humorous
- ___ Reserved/formal
- ___ Excessive use of jargon
- ___ Verbose or not easily comprehensible

Special Features:

GUIDE TO THE
ENGINEERING AND MATHEMATICAL SCIENCES LIBRARY

University of California, Los Angeles

1974/75 Issue

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Miss Rosalee Wright	Head, Reference and Reports Section	825-4951
Mrs. Madeline Russell	Head, Serials and Bindery Section	825-4035

HISTORY

The Engineering Library began operation in January 1945, soon after the arrival of Dean L. M. K. Boelter to develop the College of Engineering which is now the School of Engineering and Applied Science. This was the first branch of the University Library planned to provide a comprehensive library collection and service for a professional school. In September 1945, the Engineering Library was open only one hour a day. As the library grew, it was moved into larger quarters. From January 1952 until July 1959 the library was housed in Engineering Unit I, and since 1959 it has been in its present quarters on the eighth floor of Boelter Hall. In March 1961 the library began serving the departments of Astronomy, Mathematics and Meteorology and was renamed the Engineering and Mathematical Sciences Library.

SCOPE OF THE COLLECTION

The E.M.S. Library now contains over 135,000 volumes, receives over 6,000 current serial titles, and has over 700,000 technical reports in various forms (microcard, microfiche, microfilm, and full-size). [redacted] and the social aspects of engineering such as pollution and mass transportation. The library is a despository of publications from the Atomic Energy Commission, the National Aeronautics and Space Administration, and the National Technical Information Service. Extensive files of proceedings of scientific and technical conferences are available.

CALENDAR

September 16, 1974 — June 14, 1975

September 16 - September 29	Monday - Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	CLOSED
September 30 - November 26	Monday - Thursday	8:00 a.m. - 10:00 p.m.
	Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	1:00 p.m. - 9:00 p.m.
November 27	Wednesday	8:00 a.m. - 5:00 p.m.
November 28	Thanksgiving	CLOSED
November 29	Friday	9:00 a.m. - 5:00 p.m.
November 30 - December 14	Monday - Thursday	8:00 a.m. - 10:00 p.m.
	Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	1:00 p.m. - 9:00 p.m.
December 15 - December 22	Monday - Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	CLOSED
December 23	Administrative Holiday	9:00 a.m. - 5:00 p.m.
December 24 - December 25	Christmas Holidays	CLOSED
December 26 - December 31	Monday - Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	CLOSED
January 1	New Year's Day	CLOSED
January 2 - January 5	Monday - Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	CLOSED
January 6 - February 16	Monday - Thursday	8:00 a.m. - 10:00 p.m.
	Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	1:00 p.m. - 9:00 p.m.
February 17	President's Birthday	9:00 a.m. - 5:00 p.m.
February 18 - March 22	Monday - Thursday	8:00 a.m. - 10:00 p.m.
	Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	1:00 p.m. - 9:00 p.m.

March 23	Sunday	CLOSED
March 24	Spring Holiday	9:00 p.m. - 5:00 p.m.
March 25 - March 30	Monday - Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	CLOSED
March 31 - May 25	Monday - Thursday	8:00 a.m. - 10:00 p.m.
	Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	1:00 p.m. - 9:00 p.m.
May 26	Memorial Day	9:00 a.m. - 5:00 p.m.
May 27 - June 14	Monday - Thursday	8:00 a.m. - 10:00 p.m.
	Friday	8:00 a.m. - 5:00 p.m.
	Saturday	9:00 a.m. - 5:00 p.m.
	Sunday	1:00 p.m. - 9:00 p.m.

Schedule for Summer 1975 to be Announced

REFERENCE HOURS

The Reference Librarians are on duty:	Monday - Thursday	9:00 a.m. - 6:00 p.m.
	Friday	9:00 a.m. - 5:00 p.m.

Please see page 9 for further information about reference hours.

PHOTOCOPY SERVICE

A self-service Olivetti copier is available during all hours the library is open and a self-service Xerox copier is also available EXCEPT weekdays from 10:00 a.m. - 12 noon, when an operator is on duty to do coupon Xerox orders. Please see page ten for further information about copying facilities. Users are cautioned to bring sufficient change since there is no cashier's office in Boelter Hall.

CLOSING HOURS

We suggest that you charge out library materials well before closing time whenever possible, as the attendant at the Loan Desk has many duties to perform just before the library closes. Announcements will be made over the public address system so that everyone may be aware of the closing time. We appreciate your cooperation.

USING THE LIBRARY

The Engineering and Mathematical Sciences Library houses a large collection of scientific and technical books, periodicals and technical reports. Most of these materials are organized by broad subject areas and each book or periodical title in the collection is assigned its own specific "call number" to pinpoint its location within the collection. While you are quite welcome to browse in the stacks, we suggest that the quickest way to find specific materials is to use the card catalog which is across from the Reference Desk. (Most of the technical reports are not listed in the card catalog.) The Reference Librarians will be glad to assist you in using the library resources to find the materials you need.

The card catalog lists most of the material in the EMS Library with author cards, title cards and subject cards interfiled in one alphabet. In the upper left hand corner of each card in the catalog is the "call number" which identifies that book. Copy the entire call number for each item in which you are interested and check the Directory on page 5 of this guide or the Directory at the door to the stacks for the general location of materials.

There are three stack levels: A level is the bottom, B level is the middle and C is the top level. On each level the periodicals are shelved toward the south end on shelf ranges which are lebeled with green tags, and the books are shelved separately toward the north end of shelf ranges which are labeled with pink tags. "Oversize" books which have an asterisk (*) in the call number are shelved between the periodicals and the regular books. If you do not find the book you want, please ask the attendant at the Circulation Desk if the book is charged out to another borrower. If it is, you may place a HOLD which reserves it for your use when it is returned.

Certain special types of library materials have special locations:

(A) Reserve books, unbound periodicals and cataloged film should be requested at the Circulation Desk.

(B) Most books and periodicals published before 1930 are shelved in auxiliary stacks; please ask for them at the Circulation Desk.

(C) M.S. theses and Ph.D. dissertations on film should be requested at the Circulation Desk.

(D) Reference books should be requested at the Reference Desk.

(E) Reference indexing materials and reference guides to technical literature and technical reports should be requested at the Reference Desk.

(F) Pamphlets are shelved at the north end of Stack Level C.

(G) M.S. theses and Ph.D. dissertations that are full-size (not microfilm) are shelved in ranges along the east side of Stack Level C.

(H) Technical Reports should be requested at the Reference Desk.

LOCATION OF MATERIALS

CALL NUMBERS	SUBJECT	STACK LEVEL	RANGE NUMBERS	
			PERIODICALS	BOOKS
A	General Works	A	1	29
B	Psychology	A	1	29
C	General Biography	A	1	29
D-G	History and Geography	A	1	29
H	Social Science	A	1-4	29-30
J-K	Political Science and Law	A	4	30
L	Education (See also below.)	A	4	30
M-N	Music and Fine Arts	A	4	30
P	Language and Literature	A	4	30
Q	General Science	A	4-9	30
QA	Mathematics	A	9-18	30-34
QB	Astronomy	A	18-21	34-35
QC1-849	Physics	A	21-23	35-36
QC850-999	Meteorology	A	23-27	36-37
QD	Chemistry	A	27	37
QE	Geology	A	27	37-38
QH-QL	Biology	A	27	38
QM-R	Medical Science	A	27	38
S	Agriculture	A	27	38
T	Technology	B	1-6	32
TA	General and Civil Engineering	B	6-18	32-34
TC	Hydraulic Engineering	B	18	34
TD	Sanitary and Municipal Engr.	B	18-19	34
TE	Highway Engineering	B	19-20	34
TF	Railroad Engineering	B	20	34
TG	Structural Engineering	B	20	34
TH	Building Construction	B	20-21	34-35
TJ	Mechanical Engineering	B	21-24	35-36
TK	Electrical Engineering	B	24-31	36-40
TL	Motor Vehicles & Aeronautics	C	14-20	32-33
TN	Mining and Metallurgy	C	20-23	33-34
TP	Chemical Engineering	C	23-26	34-35
TR	Photography	C	26-27	35
TS-TT	Manufactures and Trades	C	27-29	35-36
TX	Domestic Science	C	29	36
U-V	Military and Naval Science	C	29	36
Z	Bibliography & Library Science	C	29-30	36

SPECIAL LOCATIONS

*A*S	Oversized books	A		28-29
*T-*TK	Oversized books	B		31-32
*TL-*Z	Oversized books	C		30
AZ	Double-oversize books	C		31
A-TK7885	Reference Indexes	Main Reading Room		
TK9000-Z	Reference Indexes	C		1-8
LD 791.8	M.S. Theses	C		9-11
LD 791.9	Ph.D. Dissertations	C		12-13

Reserve books and unbound periodicals — Ask at Loan Desk
Reference books and technical reports — Ask at Reference Desk

LENDING POLICY

The UCLA Library Lending Code and the Engineering and Mathematical Sciences Library lending policy are designed to provide maximum access to the collection for a large number and variety of users. The library staff is responsible for maintaining the smooth operation of the collection according to the loan procedures established in the Code, which are summarized below. Your cooperation in following these procedures will benefit all library users.

Identification

All persons wishing to borrow UCLA Library materials are required to present UCLA Registration or Library Cards for identification. All UCLA students, including research and teaching assistants, must show current UCLA Registration cards. All UCLA Faculty and Staff members must show current UCLA Library cards (applications are available at the EMS Circulation Desk). All other borrowers must show the appropriate, current UCLA Library card (applications are available at the University Research Library). Inasmuch as the Loan Desk attendants may not know long-time users, it is necessary for each borrower to show his identification each time he wishes to borrow library materials.

Charging Out Books

Charge cards for materials from the stacks are to be filled out by the borrower. Please see the samples posted near the Circulation Desk. Bring the book, the completed charge card and your Library Card to the attendant at the Circulation Desk.

Loan Periods

Unless the material falls into one of the special classes noted below, books, theses, technical reports, pamphlets and microforms may be borrowed for two weeks,* and periodicals and conferences for one week by on-campus borrowers.

Exceptions

(1) Reserve books for current courses may be borrowed for two-hour periods during the day. Unless otherwise indicated, after 4 p.m. UCLA students and staff may borrow Reserve materials overnight until 9 a.m. the next day and over the weekend after 4 p.m. on Friday until 9 a.m. the next Monday.

(2) All Reference material must be used in the library.

(3) Periodicals from the last ten years may be borrowed by UCLA Faculty, students and staff only.

(4) Latest issues of periodicals do not circulate until they have been in the library one month.

*UCLA graduate students, staff and faculty may borrow regular two week material for the entire quarter.

Renewals

Most renewals may be made in person or by telephone. (Quarter Loans must be renewed in person.) Periodicals are not renewable except to the Faculty. All other library materials may be renewed, provided (1) that they are not overdue and (2) no one else has placed a hold on them.

Book Return

Books must be returned to the same library from which they were originally charged. Library materials are due before closing on the date stamped on the date-due slip, except for Reserve and Reference books which are due at precise times during the day. There is an after-hours return chute in the lobby outside the library entrance. Material placed in this chute will be considered returned as of the time the library reopens.

Return of Quarter Loans

Material loaned until the end of the quarter must be returned at the end of the quarter, including material to be renewed for the next quarter. This procedure permits the staff to account for the material physically for inventory and, in the case of renewals, to enter the new due date on the new charge cards and the date-due slips in the books to keep the loan records as accurate as possible.

Recalls

The library may request immediate return of a book needed for two-hour reserve or material out on quarter loan whenever a hold is placed for this material. The recall voids the date due stamped in the book. Failure to respond promptly to a recall notice may result in overdue penalties.

Responsibility Of Borrower

A loan is authorized only to the individual signing the charge card and at the address shown. To protect the borrower, transfer of the book to another person or address is not permitted. It is the borrower's responsibility to note when books are due and to return them on time. Overdue notices will be sent only at the end of the academic quarter, unless earlier recall is necessary.

Overdue Fines And Penalities For Lost Books

The fines for overdue two-hour reserve books are $1 initially and $1 at each added step (8 a.m., noon, 4 p.m., and 9 p.m.). Fines for other books are 25 cents per day per book. If a book is overdue more than 21 days, it may be considered lost and a bill for the maximum fine plus replacement charges is sent to the borrower.

Briefcase Inspection

Library attendants are required to inspect briefcases of every person leaving the library. This is to make sure that library materials are not inadvertently taken from the library without being checked out. If you do not wish to have your briefcase checked, you may leave it with the attendant at the Loan Desk before entering the library turnstiles.

8.

BORROWING PRIVILEGES

BORROWER STATUS	BOOKS, THESES, TECHNICAL REPORTS PAMPHLETS and MICROFORMS	PERIODICALS (BOUND and UNBOUND) Latest issues do not circulate for 30 days after receipt	TWO-HOUR RESERVE and REFERENCE BOOKS
UCLA FACULTY UCLA ACADEMIC CONSORTIUM FACULTY	Quarter Loan, renewable	7 days, renewable	2-hour Reserve books are loaned overnight after 4 pm. Overnight and weekend charges are due at 9 am. the following weekday. Reference books are for Library use only.
UCLA STAFF UCLA GRADUATE STUDENTS	QUARTER LOAN, renewable	7 days, not renewable	Same as above.
UCLA UNDERGRADUATES EXTENSION	Two weeks, renewable	7 days, not renewable	Same as above.
OTHER UC FACULTY and GRADUATES COMPANY FEE INDIVIDUAL FEE COURTESY	Two weeks, renewable	Periodicals from the last ten years do not circulate. Those older than ten years may be borrowed for 7 days and are not renewable.	Library use only.

RENEWALS: Renewals may be requested in person or by telephone on presentation of call number. Renewals will not be granted if the material is marked "not renewable" or if a hold has been placed on the material.

HOLDS: "Holds" may be placed at the Loan Desk for material checked out to someone else. Books will be held for one week after the date returned.

SEARCHES: Please inquire at the Circulation Desk for specific books which cannot be found on the shelves.

RECALLS: The library may request immediate return of a book needed for 2-hour reserve. The recall voids the date due stamped in the book. Failure to respond to a recall notice promptly may result in overdue penalties. Recalls are also made on material out on quarter loan whenever a hold is placed for this material.

LIBRARY SERVICES AND FACILITIES

Reserve Materials

A reserve book collection is maintained for engineering students and graduate students in mathematics, astronomy and meteorology. These materials should be requested at the Loan Desk. Books on reserve are indicated as such in the card catalog on author and title cards only, not on subject cards. A card file of reserve materials is also located near the Circulation Desk. A collection of reserve materials needed for undergraduate courses in astronomy, mathematics, and meteorology is maintained by the Powell Library's Reserve Book Room.

Reference Services

Reference librarians are available during the following hours to give assistance in the use of the library collection and services:

Monday - Thursday	9:00 a.m. - 6:00 p.m.
Friday	9:00 a.m. - 5:00 p.m.

During the 1973/74 school year the reference hours may vary; please check in advance for service available after 6 p.m. If you need assistance when there is no librarian at the Reference Desk, you may leave a message on the forms provided at the Circulation Desk since student assistants on night and weekend duty at the Circulation Desk are not expected to give reference service. The area behind the Reference Desk is closed to the public except with the specific permission of a staff librarian.

Interlibrary Loans

Materials not available at UCLA may be obtained from other libraries. An interlibrary loan pickup and return station is located in the E.M.S. Library for the convenience of faculty, graduate students and research personnel from the departments of Astronomy, Chemistry, Engineering, Geology, Mathematics, Meteorology and Physics.

Computerized Bibliographic Search Service

Several data bases are available to UCLA staff and students for current awareness searches of the periodical literature. For information inquire at the Reference Desk.

Technical Reports Collection

The library has an extensive technical reports collection which is not listed in the card catalog. Please inquire at the Reference Desk for assistance in locating report material. Part of the collection is available only when a reference librarian is on duty.

Periodicals

Current unbound issues of periodicals are shelved in the Circulation-Reference area of the library. Some latest issues are shelved at the south end of the main reading room. Please inquire at the Circulation or Reference Desk.

Photocopying Facilities

The Library Audio-Visual and Photographic Service is responsible for the copying service in the EMS Library. This service is located at the south end of the main reading room. A self-service Olivetti copier is available during all hours the library is open, at a cost of 5 cents per print, during all hours the library is open EXCEPT weekdays from 10 a.m. - 12 noon, when an operator is on duty to do coupon Xerox orders. When the operator is on duty the cost of prints from the Xerox copier is 10 cents per print to UCLA staff members and students and 15 cents per print to all others. Coupons are available from a coin-operated vending machine in the Xerox room or may be purchased in larger quantities in the Office of the Audio-Visual and Photographic Services, Room 5, at the rear of the Powell Library Building. Users are cautioned to bring sufficient change since there is no cashier's office in Boelter Hall.

Microform Readers

A microfiche reader is available at all times the library is open. Please inquire at the Reference or Circulation Desk. Additional microfilm and microcard readers are available weekdays from 9 a.m. - 6 p.m. Please inquire at the Reference Desk.

Reading Areas

The main reading room provides seats for 120 readers. The Technical Reports reading room and a small lounge near the Xerox room provide additional study space.

Orientation Tours

Members of the staff will,on request, conduct orientation tours or present lectures on the use of the library and its materials to groups, including classes of students. A brief introduction to the library for groups of new faculty members may also be scheduled by calling the Reference Desk.

OTHER UCLA LIBRARIES OF INTEREST IN SCIENCE AND TECHNOLOGY

Air Pollution Reference Room, Boelter Hall, Room 5513
A small noncirculating reference collection on air pollution, particularly those types affecting California. Materials include journals, pamphlets, preprints of papers presented at meetings, and technical reports.

Architecture and Urban Planning Library, Architecture Building, Room 1209
A collection with emphasis on urban planning and design.

Biomedical Library, Center for Health Sciences, Room 12-077
A major branch of the University Library system devoted to all aspects of medicine, biology, and the health sciences. There are several special collections on the history of medicine.

Chemistry Library, Chemistry Building, Room 4238
A noncirculating collection on analytical, biological, inorganic, nuclear, organic, and physical chemistry. The library has microcards of U.S. chemical patents from 1952 to date.

Geology-Geophysics Library, Geology Building, Room 4697
Materials on physical geology, geophysics, mineralogy, petrology, mineral desposits, geochemistry, paleontology, stratigraphy, and engineering geology. Adjacent to the library is a geological map collection.

Management Library, Graduate School of Management Building, Room 1400
Materials on accounting, behavioral science for management, business economics, industrial relations, management theory and policy, production and operations management, transportation and traffic management, real estate, and urban land economics. Resources include annual reports of major American and foreign corporations.

Physics Library, Kinsey Hall, Room 213
A collection emphasizing nuclear physics, elementary particles, plasma physics, physical acoustics, solid state physics, spectroscopy, and mathematical physics. Special materials include preprints of papers from meetings of physical societies.

Public Affairs Service, University Research Library, Level A West
This facility is the reference and information center for Federal and State documents as well as the publications of some foreign and international governmental agencies. It also has a small reference collection on local government and a collection of special research materials on labor, industrial relations, social welfare, ethnic research, and urban problems.

Water Resources Center Archives, Engineering Building I, Room 2081
A noncirculating reference collection on all phases of water. There has recently been an increasing emphasis on environmental aspects. The specialized materials include publications of all of the nation's state water archives and some manuscripts.

Rough Draft #1
September, 1981

A Practical Guide
to the
EMS Library

University of California
8270 Boelter Hall
Los Angeles, CA. 90024

FLOOR PLAN

(should be on page facing Library Directory
or
note on Library Directory: see Floor Plan on p. Xx)

--A simplified version of architectural floor plan can be obtained from
URL for the guide?

--Example of good floor plan UCB Kresge Engineering Library:
- --walls and labels done in darkest lines.
- --shelving,etc. done with finer, lighter lines (doesn't compete with labeling).
- --labels printed directly on plan (no numbered key).
- --labels simple and clear (no cluttered look, easy to understand).

date code (front inside cover or back outside cover)
rev 0981

LIBRARY DIRECTORY

Item:	Location:
Auxiliary Stacks	Ask at Circ Desk
Books	Stacks
New Books	New Book Display
Change Machine	Near vending machines, outside 5th floor B.H.
Computer Searches	Ask at Ref Desk
Copying Facilities	
Photocopy machines	Photocopy Rm
Microform copies	
Microfiche-to-microfiche	Circ Desk
Microform-to-paper	Tech Repts Rm
Homework Solutions	Circ Desk
Indexes and Abstracts	Main Rdg Rm & So Rdg Rm
Interlibrary Loan	Ref Desk
Periodicals	
General/Current	Behind (left) Ref Desk & Periodical Display area
Math, Selected Astronomy & Meteorology/ Current	So Rdg Rm
Bound Issues (all)	Stacks
Reference Collection (Main)	Behind Ref Desk
Reserve Readings	Circ Desk
Restrooms	
Men's	7th floor B.H. (right)
Women's	9th floor B.H. (right)
Stack Annex (see: Auxiliary Stacks)	
Technical Reports	Tech Repts Rm & So Rdg Rm
Telephones	
Pay Phone	Opposite Circ Desk
Campus Phone	Near vending machines, outside 5th floor B.H.
Theses & Dissertations	Stacks (LD 791.8 & LD 791.9)

Abbreviations Used:

Circ Desk - Circulation Desk
B.H. - Boelter Hall
Main Rdg Rm - Main Reading Room
Ref Desk - Information/Reference Desk
So Rdg Rm - South Reading Room
Tech Repts Rm - Technical Reports Room

(library logo)

TABLE OF CONTENTS

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INTRODUCTION

Welcome to the Engineering/Mathematical Sciences Library. This brief guide was developed to assist you in using the services and materials available at EMS more effectively. Being able to locate information has become increasingly important in this day of rapidly changing technology. We're here to help. If you have any suggestions, questions, or comments, please stop by to talk to us when the Reference Desk is open.*

THE COLLECTION

The EMS collection is structured to serve the teaching and research needs of the School of Engineering and Applied Sciences and the departments of Astronomy, Atmospheric Sciences, and Mathematics. It consists of proceedings of scientific and technical conferences, periodicals, books, UCLA theses and dissertations for the above departments, technical reports (most on microfiche), and selected industrial standards. EMS is a depository of publications from the Department of Energy, NASA, and National Technical Information Service (NTIS).

*See schedule of hours, p. Xx

LIBRARY HOURS*

Monday - Thursday	8 am - 9 pm
Friday	8 am - 5 pm
Saturday	1 pm - 5 pm
Sunday	1 pm - 9 pm

Reference Desk Hours

Monday - Friday	9 am - 12 am & 1 pm - 5 pm

* Holiday, Intersession, Summer hours, or any other schedule changes will be posted.

EMS PHONE NUMBERS

Information/Reference	825-3982
Circulation (renewals & reserves)	825-4951
Technical Reports Room	825-3983
Computer Searches	825-3983 or 825-3982
EMS Librarian	825-3398
PSTL Coordinator	825-6515
Reference Office	825-3983
Interlibrary Loan Dept.	825-3646
Cataloging Dept.	825-3438
Serials Dept.	825-4035
Acquisitions Dept.	825-4035

BORROWING MATERIALS

EMS Loan Information:

	UC Undergrads, Extension students, & Staff	UC Grad Students	UC Faculty & Academic	Courtesy & Fee Card	FINES
Books, Technical Reports, & Pamphlets	4 weeks Renewable	4 weeks Renewable	4 weeks Renewable	4 weeks	
Microforms	4 weeks Renewable	4 weeks Renewable	4 weeks Renewable	4 weeks	25¢/day; $5.00 maximum
Periodicals (Bound & *Unbound)	1 week (UCLA only) Library Use (Others)	1 week (UCLA only) Library Use (Others)	1 week	Library Use	Recalled Items: 50¢/day; $10.00 maximum
Reserve Periods	2 hours/ Overnight	2 hours/ Overnight	2 hours Overnight	Library Use	Initial charge $1 plus 25¢/hr; $10.00 maximum
Reference	Library Use	Library Use	Library Use	Library Use	
**Telephone Renewals	825-4951	825-4951	825-4951	---	
ILL Privileges	Yes (UCLA)	Yes (UCLA)	Yes	---	

* Unbound periodical issues received within the last 30 days circulate for 2 hours only.

** Renewals may be made by telephone unless items are overdue.

HOLDS: You may request that any item which is checked out be held for you. EMS will notify you by mail when the item is returned.

SEARCHES: You may request a search for material you have been unable to find on the shelf. A notice will be sent by mail when the material has been located.

INFORMATION ACCESS

The EMS card catalog is divided into three parts: Author/Title, Subject, and Shelf List (list of materials in call number order). In addition, we have the University of California On-line catalog (a listing of books received by UC Libraries from 1976 onward) available for your use.

New Arrivals

There is a Catalog Supplement, on microfiche, which lists new materials received or on order for most UCLA libraries. Also, be sure to take a look at the EMS New Book Display for some of our latest additions.

Periodicals

The UCLA Serials List, on microfiche, includes periodical titles currently received by most of the UCLA libraries. Recent issues of periodicals held by EMS are shelved in the Current Periodicals Section*, alphabetically by title. Exceptions: Selected titles are shelved in the Periodical Display* area. Current Math, selected Astronomy and Meteorology titles can be found in the South Reading Room*. Bound (older) issues of periodicals are shelved in the Stacks* in call number order. EMS has a large selection of indexes and abstracts* to help you locate articles by subject as well.

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* See Floor Plan, p. Xx

Books

Check our card catalog under author, title, or subject. Most books are filed in call number order in the Stacks*. Special locational symbols on top of the call number (eg: *(oversize), Ref (reference area), Ref Ind (index and abstract area), etc.) will alert you to items which are shelved in other areas. Many books and periodicals published before 1929 (dates will vary) are kept in the Auxiliary Stacks. Ask for these at the Circulation Desk. Requests for materials in the Auxiliary Stacks received by 2:30 pm should be available by 4:30 pm the same day.

Reference Materials

The Reference Collection (noncirculating) at EMS is open to our library users. This is where you'll find the more current handbooks and tables, encyclopedias, dictionaries, biographical directories, standards, etc. EMS also has a wide selection of abstracts and indexes to the literature of Engineering and the physical sciences.

Computer Searches

The Request: Filling out a Computer Search Request form is the first step. Ask for a form at the EMS Reference Desk or call (825-3983 or 825-3982). If desired, a form can be mailed to you. Once a request form has been completed we will be better able to answer any questions you may have about cost estimates, advisability of doing the search by this method, best data bases for your topic, etc.

How It Works: The searcher needs the completed form at least one day ahead to prepare the search strategy.. The searcher will call the patron after the preliminary work is done to clarify any questions that may have arisen and ask if the patron wishes to be present to participate when the search is done. If so, an appointment can be made at this time.

The Product: The result of a search is usually a printout of citations to journal articles, conference papers, reports, etc. relevant to the search topic. Most, but not all, data bases provide abstracts.

Turnaround Time: Patrons should allow 6 or 7 days from date of search for printouts to arrive at EMS. Printouts can be picked up here or mailed to the patron. It is technically possible to print out citations online at the time the search is done, but the cost is much higher, and it is usually not feasible unless the number of citations retrieved is very small.

Costs and Service Fees: Payment may be by personal check, UCLA recharge memo form P-39A (3 copies, showing contract no. to be charged and signed by the departmental staff responsible for the fund), or purchase order. Cash payments have to be made at the Cashier's Desk in URL, and the receipt brought back to EMS. Search costs are actual online and printing charges to UCLA plus the service fee. Service fees are $5 for UCLA students and staff; $20 for all others.

Interlibrary Loan

If the material you are seeking is not held by a UCLA library, we will borrow a copy for you (or tell you where a copy might be obtained). Interlibrary loan privileges are restricted to UCLA students, faculty, and staff.

Purchase Suggestions

The library will consider purchasing materials suggested by our users, if they are suitable for this collection. We can notify the requester, if desired, when the item arrives.

Finding Particular Materials

Conferences:

A conference can be located in the card catalog under title (eg: International Joint Conference on Artificial Intelligence), editor's name, name of the organization who sponsored it, etc. You might also want to try the subject catalog under Topic - Congresses (eg: Artificial intelligence - Congresses). Conferences are filed in call number order in the Stacks.

Society Papers:

Begin by checking our card catalog for a copy of the published proceedings in which the paper was originally presented. If that isn't successful, you may want to take a look through our indexes and abstracts to see if it has been published elsewhere. Some organizations put out cumulated indexes for their own publications. Here is a sample of those held by EMS:

AIChE	(Ref ZTP 155 N514)
ASCE	(Ref TA 1 A51c)
ASME	(Ref TJ 1 A511)
IEEE	(Ref ZTK 7800 I581)
SAE	(Ref ZTL 1 S67)

Technical Reports:

A few are listed in our main catalog and some are listed in the Technical Reports Room catalog. Often, however, reports will have to be located using indexes for the technical reports literature. For example:

NTIS cumulated index (microfiche)	
NASA STAR	(Ref/ Tech Rpt TL 521 U588pa)
GRA & I	(Ref/ Tech Rpt Q 180 A1U58)

If you already have a technical report number, use that number to check the microfiche collection in the Technical Reports Room* and the paper copies of technical reports in the South Reading Room*. Even if you are unable to find a report, we may have a copy under another report number. So, be sure to ask for help. We have a technical reports assistant on duty Monday through Friday, 8 am - 12 am and 1 pm - 5 pm.

* See Floor Plan, p. Xx

Theses and Dissertations:

UCLA theses and dissertations held by EMS are listed by author, title, and subject in our card catalog. If you'd like to browse the shelves, Master's theses can be found in the Stacks in these general areas:

Astronomy	(LD 791.8 A8)
Atmospheric Sciences/ Meteorology	(LD 791.8 A85 and LD 791.8 M5)
Engineering	(LD 791.8 E4)

PhD dissertations can be found under these general call numbers:

Astronomy	(LD 791.9 A8)
Atmospheric Sciences/ Meteorology	(LD 791.9 A85 and LD 791.9 M5)
Engineering	(LD 791.9 E4)
Environmental Science and Engineering	(LD 791.9 E6)
Mathematics	(LD 791.9 M2)

If you don't find the one you are looking for, ask for assistance at the Reference Desk.

Standards and Specifications:

Standards and specifications state how materials and products should be manufactured, defined, measured or tested. Inquire at the Reference Desk for help in locating standards available at the EMS Library. Here is a sample selection:

ASTM Book of Standards	(Ref TA 401 A51b)
IEEE Standards	(Ref TK 153 I591)
SAE Handbook	(Ref TL 151 S12)

Reserve Materials and Homework Solutions:

Items placed on reserve by an instructor are kept behind the Circulation Desk. ~~Fill-out-a-charge-card-the-same-way-you-would-to-check-out-any-other--types-of-materials.~~ These can be obtained by filling out a charge card, as you would for any other type~~s~~ of material~~s~~, and presenting it to the person on duty at the Circulation Desk.

Copying Facilities

Self-service copy machines are available in the Photocopy Room*. Microform (microfilm and microfiche) copiers are located in the Technical Reports Room*. For a microfiche copy of a microfiche, bring the microfiche you want copied to the Circulation Desk. A change machine is available outside the 5th floor of Boelter Hall, near the vending machines.

Group Study

At present EMS does not have facilities for group study (group study could be accomplished over a refreshment break at the Bomb Shelter or in an outside grassy area). Because many of our patrons have expressed a desire for a quiet atmosphere in which to study, we would appreciate your keeping noise levels down to a minimum.

Library of Congress Classification System

The Library of Congress classification system, a combination of letters and numbers, is used to form "call numbers."

Sample call number: TJ
1
A511

Our materials are shelved by call number in alphanumeric order. Subject catagories of special interest to EMS users can be located in these general sections:

Call Letter	Subject
Q	General Science
QA	Mathematics
QA 76	Computer Science
QB	Astronomy
QC 1 - 849	Physics
QC 850 - 999	Meteorology
QD	Chemistry
QE	Geology

Call Letter:	Subject
S	Agriculture
T	Technology
TA	General and Civil Engineering
TC	Hydraulic Engineering
TD	Sanitary and Municipal Engineering
TE	Highway Engineering
TF	Railroad Engineering
TG	Structural Engineering
TH	Building Construction
TJ	Mechanical Engineering
TK	Electrical Engineering
TL	Motor Vehicles and Aeronautics
TN	Mining and Metallurgy
TP	Chemical Engineering
TS - TT	Manufactures and Trades
TX	Domestic Science
U - V	Military and Naval Science
Z	Bibliography

Special Locational Symbols Used

When these symbols appear above a call number, look for your material in the following locations:

Reference Desk Area

Ref
Ref Biog
Ref Conf
Ref Dict
Ref Per

Main Reading Room

Ref Ind (or Ref Index)

Stacks (oversize area)

*

South Reading Room

** (double oversize area)
Pam (pamphlet area)

Related Collections

UCLA:

Architecture and Urban Planning Library
Architecture Building, Room 1302
Phone: 825-2747

Biomedical Library
Center for Health Sciences, 12-077
Phone: 825-6098

Chemistry Library
4238 Young Hall
Phone: 825-3342

Computer Science Department Archives
3440 Boelter Hall
Phone: 825-4317

Geology-Geophysics Library
4697 Geology
Phone: 825-1055

Management Library
140 GSM
Phone: 825-3138

Mathematics Reading Room
5379 Math Sciences
Phone: 825-4930

Physics Library
213 Kinsey Hall
Phone: 825-4791

Water Resources Center Archives
2081 Engineering Building I
Phone: 825-7734

Where Is It??!

You've looked and it's not on the shelf. Now what? Before you give up, try the following:

1) The Stacks are divided into three sections (Books, Oversize Materials, and Periodicals). Check all three sections under your call number.
2) Next, see if the material has been checked out by someone else. Ask at the Circulation Desk ~~(you-can-place-a-hold-on-an-item-if-it-has-been)~~.
3) Check material left in the Photocopy Room and that located in the New Book Display.
4) Inquire at the Reference Desk for help.
5) Place a search on the item at the Circulation Desk.

A special thanks to June Armstrong (Reference Librarian, EMS, UCLA) for most of the section on computer searching and to Rosalee Wright (Head of Reference, EMS, UCLA) for the definition of standards and specifications.

FOOTNOTES

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[2] Dorothy Pollet, "You Can Get There From Here: New Directions in Library Signage," Wilson Library Bulletin 50 (February 1976):456.

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[4] Dorothy Pollet and Peter Haskell, eds., Sign Systems for Libraries: Solving the Wayfinding Problem (New York: Bowker, 1979), p. 12.

[5] Edwin Willoughby, "The College Library Handbook," Junior College Journal 8 (February 1938):237 cited by Mary C. Miller, "Library Handbooks, College and University," Encyclopedia of Library and Information Science (New York: Dekker, 1968-), p.285.

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[7] Mona McCormick, "Library Handbooks and Other Printed Bibliographic Aids," in Educating the Library User, ed. John Lubans (New York: Bowker, 1974), p. 307.

[8] R.J.P. Carey, Library Guiding: A Program for Exploiting Library Resources (London: Clive Bingley, 1974), pp. 93-4.

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[10] Mignon Adams, "Individualized Approach to Learning Library Skills," Library Trends 29 (Summer 1980):86.

[11] Fox, p. 300.

[12] Federal Library Committee Task Force on Public Relations, Guidelines for Library Handbooks (Washington: Federal Library Committee, 1972), p. 3.

[13] Beatrice Warde, *Penrose Annual* 63 (1970):76 cited by Ruari McLean, *The Thames and Hudson Manual of Typography* (London: Thames and Hudson, 1980), p. 10.

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[17] Mary C. Miller, "Library Handbooks, College and University," *Encyclopedia of Library and Information Science* (New York: Dekker, 1968-), p. 284.

[18] John Hudson Tiner, "How to Obtain Free Photographs," *How to Earn Extra Income as a Free Lance Writer* (Cincinnati, Ohio: Pamphlet Publications, 1977), p. 38.

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[21] Federal Library Committee, p. 4.

[22] Kies, p. 22.

[23] Federal Library Committee, p. 3.

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[27] Miller, p. 289.

[28] Barbara Marks, "The Language of Signs," in *Sign Systems for Libraries*, ed. Dorothy Pollet and Peter Haskell (New York: Bowker, 1979), p. 96.

[29] Herbert Spencer and Linda Reynolds, Directional Signing and Labelling in Libraries and Museums, (London: Royal College of Art, September 1977), mimeographed, p. 17.

[30] Pollet, "You Can Get There...", p. 456.

[31] Survey Comment #105 (see Appendix A).

[32] Jill and Robert Hartmann, "Inviting Design Helps the User: Any Library Can Have Pleasing Colors and Signs," Wisconsin Library Bulletin 73 (July/August 1977):162.

[33] John Lubans and Gary Kushner, "Evaluating Signage Systems in Libraries," in Pollet and Haskell, eds., p. 115.

[34] Spencer, p. 19.

[35] Marks, p. 94.

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[37] Spencer, p. 20.

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[39] Spencer, p. 41.

[40] Aaron and Elaine Cohen, Designing and Space Planning For Libraries (New York: Bowker, 1979), p. 210.

[41] Marks, p. 97.

[42] Ibid., p. 93.

[43] Carey, photograph 3-A.

[44] Cohen, p. 209.

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[46] Cohen, p. 208.

[47] Sheldon Wechsler, "Perceiving the Visual Message," in Pollet and Haskell, eds., p. 38.

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[49] Cohen, p. 205.

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[51] Pollet and Haskell, p. ix.

[52] Survey Comment #35 (see Appendix A).

[53] John Lubans, "Library User Studies," Encyclopedia of Library and Information Science (New York: Dekker, 1968-), p. 154.

[54] Survey Comment #35 (see Appendix A).

[55] Survey Comment #54 (see Appendix A).

[56] Survey Comment #63 (see Appendix A).

[57] Busha, p. 395.

[58] Patricia Jadine Pierce, "Biomedical Library Use Survey," (Specialization paper, Graduate School of Library and Information Science, UCLA, 1974), p. 8.

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[60] Cohen, p. 24.

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